

SC-HMX10
SC-HMX10A
SC-HMX10C
SC-HMX10N
SC-HMX10CN
SC-HMX10ED

High Definition Digital Camcorder

user manual



高清数码摄像机 用户说明书

imagine the possibilities

Thank you for purchasing this Samsung product.
To receive more complete service, please register your
product at
www.samsung.com/global/register

无穷想象，无限可能

感谢您购买三星产品，预享受更加全面的服务，
请到以下网站注册您的产品。

www.samsung.com/global/register

SAMSUNG

key features of your HD camcorder

The HD camcorder is capable of recording and playing back both High Definition (HD: 1280x720p) and Standard Definition (SD: 720x480p) image quality. Select the recording image quality, HD (high definition) or SD (standard definition), before recording.

ENJOYING IMAGES WITH HIGH DEFINITION (HD) QUALITY

You can view movies with the HD (high definition) image quality.

- This HD camcorder adopts the advanced 720p effective scanning lines to reproduce a sharper image than the old SD camcorder (480i) and supports the widescreen view in the aspect ratio of 16:9.
- The movies recorded in the HD (high definition) image quality will best fit the wide (16:9) HDTV. If your TV is not a high definition TV, movies with HD (high definition) image quality will be displayed with SD (standard definition) image quality.
 - To enjoy HD-quality images, you need a TV supporting 1280x720p input. Check you have a high definition TV (HDTV). (Refer to your TV user manual.)
 - To enjoy the HD-quality images, use the component cable or HDMI cable. The multi-AV cable does not support HD-quality images so it down-converts them to SD-quality images.
- The image is recorded in 720x480p when the quality is set to SD in the HD camcorder. The movies recorded with SD (standard definition) image quality cannot be converted to HD (high definition) image quality.

主要特点

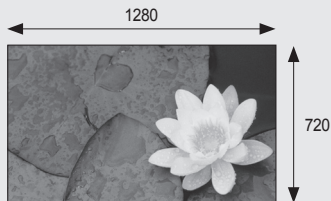
本高清数码摄像机支持使用高清晰度 (HD: 1280x720p) 和标准清晰度 (SD: 720x480p) 图像质量进行录制和播放。在录制之前, 请选择录制图像质量, HD (高清晰度) 或 SD (标准清晰度)。

使用高清晰度质量 (HD) 欣赏图像

您可以使用 HD (高清晰度) 质量观看图像

- 本高清数码摄像机采取先进的 720p 逐行扫描比老的 SD 摄像机 (480i) 支持更锐化的图像并且支持 16:9 高宽比屏幕显示。
- 使用 HD (高清晰度) 画质录制的影音将更适合宽屏 (16:9) 高清电视机。如果您的电视机不是高清晰度电视, 则使用 HD (高清晰度) 画质录制的图像将以 SD (标准清晰度) 画质显示。
 - 预欣赏 HD 质量图像, 您需要一台支持 1280x720p 输入的电视机。检查您的高清晰度电视 (HDTV) (参考您的电视使用说明书)。
 - 预享受 HD 质量图像, 使用分量电缆或者 HDMI 电缆。
- multi-AV 电缆不支持 HD 质量图像因此图像将被转换为 SD 质量。
- 将高清数码摄像机设置到 SD 质量以 720x480p 分辨率录制。被录制的影音为 SD (标准清晰度) 画质, 不能够转换为 HD (高清晰度) 画质。

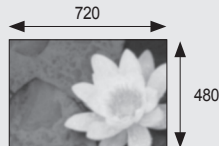
HD (high definition) image quality : 60p (Progressive)



<720p / 16:9 high definition camcorder>

Image resolution: about 5 times that of the old SD camcorder(480i).

SD (standard definition) image quality : 60i (interlaced)



<480i / normal digital camcorder>

FEATURES OF YOUR NEW HD CAMCORDER

1.61 Mega pixel (Gross) CMOS sensor

1/4.5" CMOS sensor provides stunning detail and clarity with exceptional video (1280 lines of resolution-HD mode or 720 lines of horizontal resolution-SD mode) and still image performance (3.0 mega pixels). Unlike traditional CCD imagers, CMOS sensors require less power, providing better battery performance.

High-capacity embedded flash memory (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only)

The HD camcorder has built-in high capacity flash memory that allows you to record movie or photo images.

H.264 (MPEG4 part10/AVC) encoding

The latest video compression technology, H.264 uses a high compression rate to sharply increase the recordable time for the same size storage.

HDMI interface (Anynet+ supported)

- If you have an HDTV featuring the HDMI jack, you can enjoy a clearer and sharper image than ever on a normal TV.
- This HD camcorder supports Anynet+. Anynet+ is an AV network system that enables you to control all connected Samsung AV devices with Anynet+ supported Samsung TV's remote control. Refer to the corresponding TV's user manual for more details.

2.7" wide (16:9) touch panel LCD screen (230K pixels)

The 2.7" wide (16:9) LCD screen provides excellent viewing clarity with improved resolution. The 230K pixel LCD screen rotates up to 270 degrees for multiple viewing angles providing sharp, detailed images for monitoring or playback, and the widescreen format makes shooting in 16:9 mode and composing shots even easier.

Touch panel adopted

You can play recorded images and set the functions by simply tapping on the LCD screen without sophisticated button operation.

Swivel handle for free style shooting

You can adjust the swivel handle's angle depending on the recording situation because the swivel handle rotates upto 150°.

iii_English

本高清数码摄像机的特点

1.61 百万像素 (总的) CMOS 传感器

1/4.5" CMOS 传感器为您提供超乎寻常清晰质量的视频 (高清模式 HD 模式 1280 行或标准清晰度 SD 模式 720 行) 和静态图像 (3.0 百万像素)。不同于传统 CCD, CMOS 传感器需要的电量较少, 更加节省电池电量。

高质量嵌入闪存 (仅限 SC-HMX10A/HMX10C/HMX10CN/HMX10ED)

本高清数码摄像机内置了可让您录制影音图像和拍摄照片的高容量闪存。

H.264(MPEG4 part10/AVC) 编码

最新的视频压缩技术, H.264 使用高压压缩率在同样大小的存储介质增加可录制时间。

HDMI 接口 (支持 Anynet+)

- 如果您有具备 HDMI 的高清电视机, 您可以欣赏较普通电视更加清晰的画面。
- 本高清数码摄像机支持 Anynet+。Anynet+ 是一种 AV 网络系统, 它可以通过支持 Anynet+ 的三星电视机遥控器, 控制所有被连接的支持 Anynet+ 三星 AV 设备。欲知详情, 请参见相应的电视机使用说明书。

2.7" 宽屏幕 (16:9) 触控 LCD 控制板 (230K 像素)

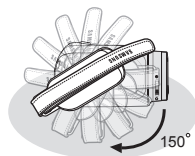
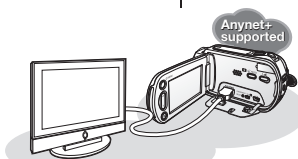
2.7" 宽屏幕 (16:9) LCD 显示屏提供高分辨率以便观看清晰的画面。230K 像素的 LCD 显示屏最多可旋转到 270 度以实现灵活的观看角度。同时可为监视和播放提供清晰、详尽的图像。

采用触控控制板

您可以播放录制的图像和设置一些功能, 仅需简单地轻触在 LCD 显示屏的一些功能操作按钮。

旋转手柄

您可以根据录制情况调整旋转手柄, 调整角度最大可到 150°。



safety warnings

What the icons and signs in this user manual mean:

 WARNING	Means that death or serious personal injury is a risk.
 CAUTION	Means that there is a potential risk for personal injury or material damage.
 CAUTION	To reduce the risk of fire, explosion, electric shock, or personal injury when using your HD camcorder, follow these basic safety precautions:
	Means hints or referential pages that may be helpful when operating the HD camcorder.

These warning signs are here to prevent injury to you and others. Please follow them explicitly. After reading this section, keep it in a safe place for future reference.

precautions

Warning!

- This camcorder should always be connected to an AC outlet with a protective grounding connection.
- Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

Caution

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

If this power supply is used at 240V ac, a suitable plug adapter should be used.

安全警告

本说明书中图示和符号的意思：

 警告	意味着有死亡或者会受到严重人身伤害的危险。
 注意	意味着有受到人身伤害或者损失财产的潜在危险。
 小心	当使用数码摄像机时，为了减少火灾、爆炸、电击、或人身伤害的危险，请遵守以下基本安全预防措施：
	对于操作数码摄像机有用的提示或是参考页。

为了您和其他人不受伤害，请注意并且遵照这些警示符号以及提示信息。请务必遵照以上内容执行。仔细阅读之后，请将此内容另行保存，以供日后参考。

安全预防措施

警告！

- 本摄像机应长期连接电源防护地接线。
- 电池组不应该暴露于过热的地方。譬如有阳光，火等类似的地方。

注意

如果电池组更换不正确会有爆炸的危险。
仅更换使用同样或等效型的电池组。

如果您使用交流电源 240V 的电源供应器，请使用适合的插头适配器。

important information on use

BEFORE USING THIS CAMCORDER

- This HD camcorder records video in H.264 (MPEG4 part10/AVC) format and at High Resolution (HD-VIDEO) and at Standard Resolution (SD-VIDEO).
- Please note that this HD camcorder is not compatible with other digital video formats.
- **Before recording important video, make a trial recording.**
Play back your trial recording to make sure the video and audio have been recorded properly.
- **The recorded contents cannot be compensated for:**
 - Samsung cannot compensate for any damage caused when a recording cannot be played back because of a defect in the HD camcorder or memory card.
Samsung cannot be responsible for your recorded video and audio.
 - Recorded contents may be lost due to a mistake when handling this HD camcorder or memory card, etc. Samsung shall not be responsible for compensation for damages due to the loss of recorded contents.
- **Make a backup of important recorded data**
Protect your important recorded data by copying the files to PC. We also recommend you copy it from your PC to other recording media for storage. Refer to the software installation and USB connection guide.
- **Copyright: Please note that this HD camcorder is intended for individual use only.**
Data recorded on the storage media in this HD camcorder using other digital/analogue media or devices is protected by the copyright act and cannot be used without permission of the owner of copyright, except for personal enjoyment. Even if you record an event such as a show, performance or exhibition for personal enjoyment, it is strongly recommended that you obtain permission beforehand.

有关使用的重要信息

在使用本摄像机之前

- 本高清数码摄像机以 H.264 (MPEG4 part10/AVC) 格式和高清晰度质量 (HD-VIDEO) 以及标准清晰度质量 (SD-VIDEO) 录制影音。
- 请注意本高清数码摄像机不与其它数字式视频格式兼容。
- 请在录制重要影音之前，进行试录制。
播放您试录制的图像，确定视频和音频被录制了下来。
- **录制的内容不能补偿：**
 - 因为高清数码摄像机或者存储卡有瑕疵而造成的录制内容无法播放，三星公司无法补偿任何损失。
对您录制的视频和音频三星公司概不负责。
 - 操作本高清数码摄像机或者存储卡等时，录制的内容也许会丢失。
三星公司不会对录制的内容损坏负责。
- **备份重要的录制数据**
将文件复制到电脑，保护您重要的录制数据。推荐您将文件从电脑复制到其它存储介质保存。请参见软件安装和 USB 连接指南。
- **版权：请注意本高清数码摄像机仅为个人使用。**
使用其他模拟 / 数字媒体或设备在本高清数码摄像机的存储介质上录制的的数据受版权法保护，未经版权所有人允许不得使用。个人欣赏除外。即使您录制诸如展览、表演或展示等活动进行个人欣赏，也强烈建议您事先获得允许。

important information on use

ABOUT THIS USER MANUAL

- This user manual covers models SC-HMX10, SC-HMX10A, SC-HMX10C, SC-HMX10N, SC-HMX10CN, and SC-HMX10ED. The SC-HMX10A, SC-HMX10C/HMX10CN, and SC-HMX10ED have a 4GB, 8GB, and 16GB built-in flash memory respectively but also use memory cards. The SC-HMX10/HMX10N does not have built-in flash memory and uses memory cards exclusively. Although some features of SC-HMX10, SC-HMX10A, SC-HMX10C, SC-HMX10N, SC-HMX10CN and SC-HMX10ED are different, they operate in the same way.
- Illustrations of model SC-HMX10A are used in this user manual.
- The displays in this user manual may not be exactly the same as those you see on the LCD screen.
- Designs and specifications of the camcorder and other accessories are subject to change without any notice.

NOTES REGARDING TRADEMARK

- All the trade names and registered trademarks mentioned in this manual or other documentation provided with your Samsung product are trademarks or registered trademarks of their respective holders.
- Windows® is registered trademark or trademark of Microsoft Corporation, registered in the United States and other countries.
- Macintosh is the trademark of Apple Computer, Inc.
- All the other product names mentioned herein may be the trademark or registered trademarks of their respective companies.
- Farther more, "TM" and "R" are not mentioned in each case in this manual.

有关使用的重要信息

关于本用户手册

- 本用户手册适用于 SC-HMX10, SC-HMX10A, SC-HMX10C, SC-HMX10N, SC-HMX10CN, 和 SC-HMX10ED 的完整系列。SC-HMX10A, SC-HMX10C/HMX10CN, 和 SC-HMX10ED 分别拥有 4GB, 8GB 和 16GB 内置闪存, 但是也可使用存储卡。SC-HMX10/HMX10N 没有内置闪存但是可以使用专门的存储卡。尽管 SC-HMX10, SC-HMX10A, SC-HMX10C, SC-HMX10N, SC-HMX10CN, 和 SC-HMX10ED 有所不同, 但是它们的操作方式是一样的。
- 在本用户说明书中使用 SC-HMX10A 型号的图例说明。
- 本用户手册中的显示可能不如您在 LCD 屏幕上看到的那样准确。
- 存储介质和其他附件的设计和规格若有变更, 恕不另行通知。

关于商标的注意事项

- 此手册或其他 Samsung 产品说明文件中提及的所有产品名称和注册商标是其各自所有者的商标或注册商标。
- Windows® 是 Microsoft Corporation 在美国或其他国家注册的注册商标或商标。
- Macintosh 是 Apple Computer, Inc. 的商标。
- 此处提及的所有其他产品名称可能是其各个公司的商标或注册商标。
- 此外, 本手册中的各项示例均未提及 "TM" 和 "R"。

precautions when using

IMPORTANT NOTE

- **Handle the liquid crystal display (LCD) with care:**
 - The LCD is a very delicate display device: Do not press its surface with force, hit it or prick it with a sharp object.
 - If you push the LCD surface, unevenness in display may occur. If unevenness does not disappear, turn the camcorder off, wait for a few moments, and then turn it on again.
 - Do not place the camcorder with the open LCD screen down.
 - Close the LCD screen when not using the camcorder.
- **Liquid crystal display:**
 - The LCD screen the product of highly precise technology. Among the total number of pixels (approx. 230,000 pixels for LCD screen), 0.01% or less pixels may be missing (black dots) or may remain lit as colored dots (red, blue, green). This shows the limitations of the current technology, and does not indicate a fault that will interfere with recording.
 - The LCD screen will be slightly dimmer than usual when the camcorder is at low temperature, as in cold areas, or immediately after power is turned on. Normal brightness will be restored when the temperature inside the camcorder rises. This has no effect on the images in the storage media, so there is no cause for concern.
- **Hold the HD camcorder correctly:**

Do not hold the HD camcorder by the LCD screen when lifting it: the LCD screen could detach and the HD camcorder may fall.
- **Do not subject the HD camcorder to impact:**
 - This HD camcorder is a precision machine. Take great care that you do not strike it against a hard object or let it fall.
 - Do not use the HD camcorder on a tripod (not supplied) in a place where it is subject to severe vibrations or impact.
- **No sand or dust!**

Fine sand or dust entering the HD camcorder or AC power adaptor could cause malfunctions or defects.
- **No water or oil!**

Water or oil entering the HD camcorder or AC power adaptor could cause electric shock, malfunctions or defects.
- **Heat on surface of product:**

The surface of the HD camcorder will be slightly warm when in use, but this does not indicate a fault.
- **Be careful of ambient temperature:**
 - Using the HD camcorder in a place where the temperature is over 60°C (140°F) or under 0°C (32°F) will result in abnormal recording/playback.
 - Do not leave the HD camcorder on a beach or in a closed vehicle where the temperature is very high for a long time: This could cause a malfunction.

使用须知

重要注意事项

- **细心处理液晶显示器 (LCD):**
 - LCD 是非常精密的显示设备: 切勿用力压其表面, 或使用尖锐的物体击打或刺戳。
 - 如果您按压 LCD 表面, 可能会在显示时出现不平整现象。如果不平整现象不消失, 请关闭摄像机, 等待片刻后再次打开。
 - 切勿使打开的 LCD 屏幕向下放置摄像机。
 - 在不使用摄像机时关闭 LCD 显示器。
- **液晶显示:**
 - LCD 屏幕是采用高精密技术制造的产品。在总像素 (LCD 显示器的大约 230,000 像素) 中, 0.01% 或更少的像素可能会损失 (黑点), 或可能以彩色 (红、蓝和绿色) 的点亮起。这表明了当前技术的局限性, 但不表示是影响录制的故障。
 - 当摄像机在温度较低的环境 (如在寒冷地区) 时, LCD 屏幕会比正常时稍暗, 或在打开电源后显示正常。当摄像机内部的温度上升时, 会恢复到原来的亮度。注意, 上述现象对存储介质中的图像没有什么影响, 因此无需顾虑。
- **正确把持数码摄像机:**
 - 不要握住数码摄像机的 LCD 显示器来提起它: LCD 显示器可能会拆离, 从而导致数码摄像机跌落。
- **切勿撞击数码摄像机:**
 - 本数码摄像机是精密机器。要特别小心, 不要让其撞击硬物或摔落。
 - 切勿在严重振动或撞击的地方将数码摄像机放在三脚架上使用。
- **要避免沙尘!**
 - 细沙或灰尘进入数码摄像机或交流电源适配器会引起故障。
- **要避免水或油!**
 - 水或油进入数码摄像机或交流电源适配器会引起触电或故障。
- **产品表面变热:**
 - 在使用时, 数码摄像机表面会轻微变热, 但这并不表示有故障。
- **注意异常的环境温度:**
 - 在温度高于 60°C (140°F) 或低于 0°C (32°F) 的地方使用数码摄像机, 可能会导致录制/播放不正常。
 - 切勿将数码摄像机放在沙滩上或温度长时间会很热的封闭车辆中: 这样可能会导致发生故障。

precautions when using

- **Do not point directly at the sun:**
 - If direct sunlight strikes the lens, the HD camcorder could malfunction or a fire could occur.
 - Do not leave the HD camcorder with the LCD screen exposed to direct sunlight: This could cause a malfunction.
- **Do not use the HD camcorder near TV or radio:**

This could cause noise to appear on the TV screen or in radio broadcasts.
- **Do not use the HD camcorder near strong radio waves or magnetism:**

If the HD camcorder is used near strong radio waves or magnetism, such as near a radio transmitter or electric appliances, noise could enter video and audio that are being recorded. During playback of normally recorded video and audio, noise may also be present in picture and sound. At worst the HD camcorder could malfunction.
- **Do not expose the HD camcorder to soot or steam:**

Thick soot or steam could damage the HD camcorder case or cause a malfunction.
- **Do not use the HD camcorder near corrosive gas:**

If the HD camcorder is used in a place where there is dense exhaust gas generated by gasoline or diesel engines, or corrosive gas such as hydrogen sulfide, the external or internal terminals could corrode, disabling normal operation, or the battery connecting terminals could corrode, so that power will not turn on.
- **Do not wipe the HD camcorder body with benzene or a thinner:**
 - The coating of exterior could peel off or the case surface could deteriorate.
- **Keep the memory card out of reach of children to prevent swallowing.**

使用须知

- **切勿直接对着太阳:**
 - 如果阳光直射镜头, 数码摄像机可能会出现故障或发生火灾。
 - 在放置数码摄像机时, 切勿让阳光直射 LCD 屏幕: 这样可能会导致发生故障。
- **切勿在电视或收音机旁边使用本数码摄像机:**

这样可能会导致在电视屏幕或收音机中出现噪音。
- **切勿在靠近强无线电波或强磁力的地方使用数码摄像机:**

如果在靠近强无线电波或强磁力的地方使用数码摄像机, 如无线电转播塔或电器设备, 则在录制的视频和音频中可能会夹杂有噪音。在播放正常录制的视频和音频时, 在画面和声音中也可能会出现噪音。在最坏的情况下, 数码摄像机可能会出现故障。
- **切勿让数码摄像机接触烟灰或蒸汽:**

浓厚的烟灰或蒸汽会损坏数码摄像机外壳或导致出现故障。
- **切勿在腐蚀性气体旁边使用数码摄像机:**

如果在由汽油或柴油机产生的废气或腐蚀性气体(如硫化氢)很浓的地方使用数码摄像机, 外部或内容终端会被腐蚀, 无法进行正常的操作, 或电池连接终端会被腐蚀, 致使无法打开电源。
- **切勿使用苯或稀释剂清洁数码摄像机机体:**
 - 外层会脱落或外壳表面会被损坏。
- **将存储卡放在儿童接触不到的地方, 以防其吞下。**

contents

INTRODUCTION TO BASIC FEATURES 05

GETTING TO KNOW YOUR HD CAMCORDER	06	What is included with your HD cam-
	07	corder
	08	Front & left view
	09	Right & top view
		Rear & bottom view

PREPARATION	10	Using the remote control
	11	Installing the button-type battery
	11	Using the cradle
	12	Holding the HD camcorder
	13	Charging the battery pack
	17	Basic HD camcorder operation
	18	Screen indicators
	22	Using the display (□)/i/CHECK button
	22	Using the LCD enhancer (□)
	23	Using the LCD screen
	24	Initial setting: OSD language & date and time

BEFORE RECORD- ING	26	Selecting the storage media (SC-HMX10A/HMX10C/HMX10CN/ HMX10ED only)
	27	Inserting/ejecting a memory card
	28	Recordable time and number of images
	29	Selecting a suitable memory card

目录

基本特点 05

了解您的高清数码 摄像机	06	您的高清数码摄像机包括哪些配件
	07	前视图 & 左视图
	08	右视图 & 顶视图
	09	后视图&底视图

准备	10	使用遥控器
	11	安装纽扣电池
	11	使用多功能支架
	12	握住高清数码摄像机
	13	为电池组充电
	17	高清数码摄像机的基本操作
	18	显示屏指示图标
	22	使用屏幕显示 (□)/i/CHECK 按钮
	22	使用 LCD 增强器 (□)
	23	使用 LCD 显示屏
	24	初次设置 : OSD 语言 & 日期和时间

录制之前	26	选择存储介质 (仅限 SC-HMX10A/HMX10C/ HMX10CN/HMX10ED)
	27	插入 / 取出存储卡
	28	可录制的时间和图像数量
	29	选择适当的存储卡

contents

RECORDING	31	Recording movie images
	33	Taking photo images
	34	Recording with ease for beginners (EASY Q mode)
	35	Capturing still images during movie image playback
	36	Using the external microphone
	36	Zooming
	37	Self record using the remote control

PLAYBACK	38	Changing the playback mode
	39	Playing movie images
	41	Viewing photo images

CONNECTION	43	Connecting to a TV
	46	Dubbing images on VCR or DVD/HDD recorder

USING THE MENU ITEMS	47	Handling menus and quick menus
	49	Menu items
	51	Quick menu items
	52	Recording menu items
	64	Playback menu items
	66	Setting menu items

目录

录制	31	录制影音图像
	33	捕获照片图像
	34	方便初学者录制 (EASY Q 模式)
	35	在播放影音的时候捕捉静态图像
	36	使用外置麦克风
	36	变焦
	37	使用遥控器自拍

播放	38	切换到播放模式
	39	播放影音图像
	41	查看照片图像

连接	43	与电视机连接
	46	通过 VCR 或 DVD/HDD 刻录机复制图像

使用菜单选项	47	操作菜单和快捷菜单
	49	菜单选项
	51	快捷菜单选项
	52	录制菜单选项
	64	播放菜单选项
	66	设置菜单选项

contents

EDITING MOVIE IMAGES	72	Deleting a section of a movie image
	73	Dividing a movie image
	74	Combining two movie images
	75	Playlist

IMAGE MANAGEMENT	78	Protection from accidental erasure
	79	Deleting images
	80	Copying images (SC-HMX10A/ HMX10C/HMX10CN/HMX10ED only)
	81	Moving images (SC-HMX10A/HMX10C/ HMX10CN/HMX10ED only)

PRINTING PHOTO IMAGES	82	DPOF print setting
	83	Direct printing with a PictBridge printer

CONNECTING TO A PC	85	System requirements
	86	Installing the Cyberlink DVD Suite
	88	Connecting the USB cable
	89	Viewing the contents of storage media
	91	Transferring files from the HD cam-corder to your PC

目录

编辑影音图像	72	删除被选的影音图像
	73	分割影音图像
	74	合并两个影音图像
	75	播放列表

图像管理	78	保护图像
	79	删除图像
	80	复制图像 (仅限 SC-HMX10A/HMX10C/HMX10CN)
	81	移动图像 (仅限 SC-HMX10A/HMX10C/HMX10CN)

打印照片图像	82	DPOF 打印设置
	83	通过 PictBridge 打印机直接打印

连接至电脑	85	系统要求
	86	安装 Cyberlink DVD Suite
	88	连接 USB 数据线
	89	查看存储介质内容
	91	从高清数码摄像机转移文件至电脑

contents

MAINTENANCE & ADDITIONAL INFORMATION	92	Maintenance
	93	Additional information
	95	Using your HD camcorder abroad

TROUBLE-SHOOT-ING	96	Troubleshooting
--------------------------	-----------	-----------------

SPECIFICATIONS	109
-----------------------	------------

目录

维护和其他信息	92	维护
	93	其他信息
	95	在国外使用您的高清数码摄像机

故障处理	96	故障处理
-------------	-----------	------

规格	109
-----------	------------

introduction to basic features

This chapter introduces you to the basic features of your HD camcorder. See the reference pages below for more information.

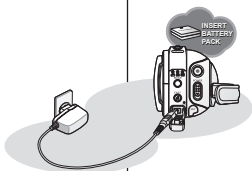
基本特点

本章节为您介绍高清数码相机的基本特点。
更多内容请参见向后页。

Step 1

Preparation

- Charging the battery pack ↪ page 13
- Setting the date/time and OSD language ↪ page 24-25
- Setting the storage media (built-in memory or memory card) ↪ page 26
(SC-HMX10A/HMX10C/HMX10CN/HMX10ED only)



第 1 步

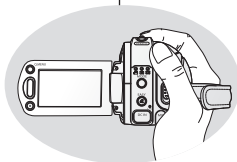
准备

- 为电池组充电 ↪ 第 13 页
- 设置日期 / 时间和 OSD 语言。↪ 第 24-25 页
- 设置存储介质 (内置存储器或存储卡)。↪ 第 26 页 (仅限 SC-HMX10A/HMX10C/HMX10CN/HMX10ED)

Step 2

Recording

- Recording the movie or photo images ↪ pages 31,33



第 2 步

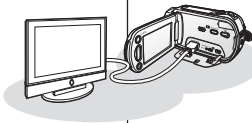
录制

- 录制影音图像或拍照。↪ 第 31,33 页

Step 3

Playing back

- Selecting an image to play back from the thumbnail index views ↪ pages 39, 41
- Viewing playback from your HD camcorder on your PC or TV ↪ pages 43, 88



第 3 步

播放

- 在索引画面中选择要播放的图像。↪ 第 39, 41 页
- 通过连接到电脑或电视上查看、播放来自数码相机图像。↪ 第 43, 88 页

getting to know your HD camcorder

WHAT IS INCLUDED WITH YOUR HD CAMCORDER

Your new HD camcorder comes with the following accessories. If any of these items is missing from your box, call Samsung's Customer Care Center.

★ The exact appearance of each item may vary by model.

1	Battery pack (IA-BP85ST)
2	AC power adaptor (AA-E9 type)
3	Multi-AV cable
4	Component cable
5	USB cable
6	User manual
7	Button-type battery
8	Remote control
9	Cradle
10	Software CD
11	Pouch
12	HDMI cable*



- The contents may vary depending on the sales region.
- Parts and accessories are available at your local Samsung dealer.
- * : Not included with your camcorder. To buy the optional accessory, contact your nearest Samsung dealer.
- A memory card is not included. See page 29 for memory cards compatible with your HD camcorder.

了解您的高清数码摄像机

您的高清数码摄像机包括哪些配件

新的高清数码摄像机配有以下部品。
如果缺少任一部品，请联系三星客服中心。

★ 提供的配件情形视产品型号的不同而有所变化。

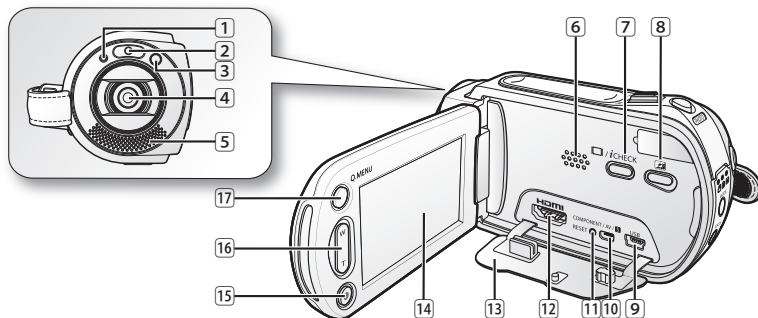
1	电池组 (IA-BP85ST)
2	交流电源适配器 (AA-E9 type)
3	AV连接电缆
4	分量电缆
5	USB 数据线
6	用户说明书
7	钮扣电池
8	遥控器
9	多功能支架
10	CD光盘
11	摄像机袋
12	HDMI电缆*



- 提供配件视销售地区的不同而有所不同。
- 当地 Samsung 经销商可以提供产品零件和配件。
- * : 您的摄像机没有提供。要购买可选购的配件，请联络与您最近的 Samsung 经销商。
- 配件不包括存储卡。参见第 29 页选择合适高清摄像机的存储卡。

FRONT & LEFT VIEW

前视图 & 左视图



- | | |
|----|-----------------------------------|
| 1 | Recording indicator |
| 2 | LED Light |
| 3 | Remote sensor |
| 4 | Lens |
| 5 | Internal microphone |
| 6 | Built-in speaker |
| 7 | Display (LCD) / iCHECK button |
| 8 | LCD enhancer button |
| 9 | USB jack |
| 10 | COMPONENT / AV / S-Video (S) jack |
| 11 | RESET button |
| 12 | HDMI jack |
| 13 | Jack cover |
| 14 | TFT LCD screen (Touch panel) |
| 15 | Recording start/stop button |
| 16 | Zoom (W/T) button |
| 17 | Q.MENU button |

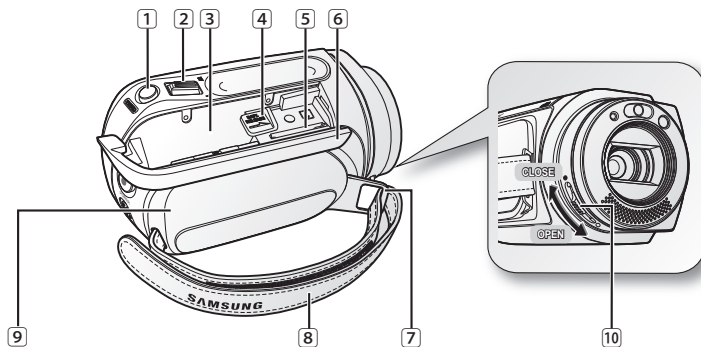
- | | |
|----|-------------------------------|
| 1 | 录制指示灯 |
| 2 | LED灯 |
| 3 | 遥感器 |
| 4 | 镜头 |
| 5 | 内置麦克风 |
| 6 | 内置扬声器 |
| 7 | 显示按钮(LCD) / iCHECK |
| 8 | LCD增强器按钮 |
| 9 | USB接口 |
| 10 | COMPONENT / AV / S-Video(S)接口 |
| 11 | RESET按钮 |
| 12 | HDMI接口 |
| 13 | 接口盖 |
| 14 | TFT LCD显示屏(触控控制板) |
| 15 | 录制开始/停止按钮 |
| 16 | 变焦按钮(W/T) |
| 17 | Q.MENU按钮 |

getting to know your HD camcorder

RIGHT & TOP VIEW

了解您的高清数码摄像机

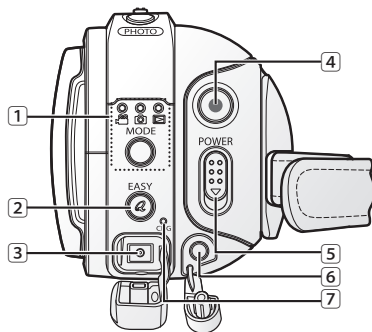
右视图 & 顶视图



- ① PHOTO button
- ② Zoom (W/T) lever
- ③ Battery pack slot
- ④ BATT. RELEASE switch
- ⑤ Memory card slot
- ⑥ Battery pack / Memory card cover
- ⑦ Grip belt hook
- ⑧ Grip belt
- ⑨ Swivel handle
- ⑩ Lens open / close switch

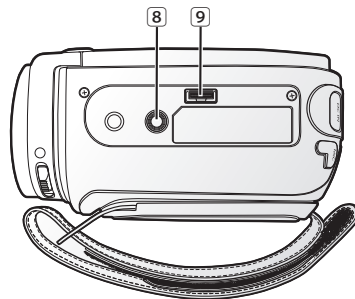
- ① PHOTO 按钮
- ② 变焦控制杆 (W/T)
- ③ 电池组插槽
- ④ 电池组卡扣
- ⑤ 存储卡插槽
- ⑥ 电池组 / 存储卡盖
- ⑦ 手带挂钩
- ⑧ 手带
- ⑨ 旋转手柄
- ⑩ 镜头开 / 关转换器

REAR & BOTTOM VIEW



- ① MODE button / Mode indicator
(Movie () / Photo () / Play () mode)
- ② EASY Q button
- ③ DC IN jack
- ④ Recording start/stop button
- ⑤ POWER switch
- ⑥ External microphone (MIC) jack
- ⑦ Charging (CHG) indicator
- ⑧ Tripod receptacle
- ⑨ Cradle receptacle

后视图 & 底视图



- ① MODE 按钮 / 模式指示灯
(影音 () / 照片 () / 播放 () 模式)
- ② EASY Q 按钮
- ③ DC IN 接口
- ④ 录制开始 / 停止按钮
- ⑤ 电源开关
- ⑥ 外置麦克风接口
- ⑦ 充电指示 (CHG)
- ⑧ 三脚架插孔
- ⑨ 支架插座

preparation

This section provides information on using this HD camcorder; such as how to use the provided accessories, how to charge the battery, how to set up the operation mode and initial set up.

USING THE REMOTE CONTROL

- 1 REC button
- 2 DISPLAY (Ⓢ) button
- 3 Skip (⏮/⏭) button
- 4 Stop (⏹) button
- 5 MENU button
- 6 Control (⏮/⏭/⏮/⏭/⏮) buttons
- 7 PHOTO button
- 8 Zoom (W/T) button
- 9 SELF TIMER button
- 10 Search (⏮/⏭) button
- 11 Slow playback (⏮) button
- 12 Play/Pause (⏮) button
- 13 Q.MENU button

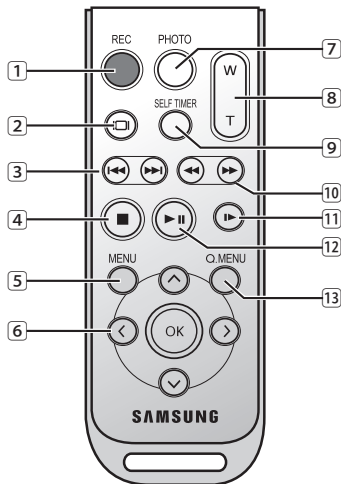


The buttons on the remote control function the same as those on HD camcorder.

准备

本部分为您介绍在使用高清数码摄像机之前如何使用提供的配件，如何给电池组充电，如何设定操作模式等信息。

使用遥控器



- 1 REC 按键
- 2 DISPLAY (Ⓢ) 按键
- 3 跳过 (⏮/⏭) 按键
- 4 停止 (⏹) 按键
- 5 MENU 按键
- 6 控制 (⏮/⏭/⏮/⏭/⏮) 按键
- 7 PHOTO 按键
- 8 变焦 (W/T) 按键
- 9 SELF TIMER 按键
- 10 搜索 (⏮/⏭) 按键
- 11 慢放 (⏮) 按键
- 12 播放 / 暂停 (⏮) 按键
- 13 Q.MENU 按键



遥控器上的按键与高清数码摄像机上的按钮功能相同。

INSTALLING THE BUTTON-TYPE BATTERY

Installing the button-type battery in the remote control

1. Turn the battery holder counterclockwise (as indicated with (⊙) mark) using your fingernail or a coin to open it. The battery holder opens.
2. Insert the battery into the battery holder while the positive (+) terminal facing down and press it firmly until you hear a locking sound.
3. Place the battery holder back in the remote, match its (⊙) mark with the (○) mark on the remote control, and turn the battery holder clockwise to lock it.

Precautions regarding the button-type battery

- There is a danger of explosion if button-type battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not pick up the battery using tweezers or other metal tools. This will cause a short circuit.
- Do not recharge, disassemble, heat or immerse the battery in water to avoid the risk of explosion.



Keep the button-type battery out of the reach of the children.
Should any battery be swallowed, consult a doctor immediately.

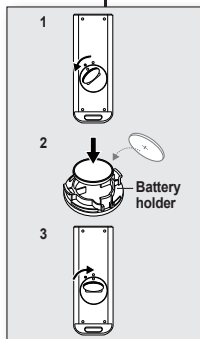
USING THE CRADLE

The cradle is a connection plate which can be used to make the camcorder more stable when charging the battery, or connecting to an external device (TV, PC, etc.).



- If you connect your HD camcorder to the provided cradle using more than one type of cable to output image, the order of priority of the output signal is as follows: USB cable → Component /Multi-AV cable.
- Do not connect the connection cables at the same time, it may cause conflict and may not work properly. If this occurs, remove all the connected cables and try the connection again.

安装纽扣电池



安装遥控器内的纽扣电池。

1. 用指甲或硬币向左转动电池舱盖（按照标识的标记(⊙)）。
2. 电池正面朝下(+)插入电池插槽并且轻轻按下直到听到电池被锁住的声音。
3. 将电池安装在遥控，将遥控器上的标记(⊙)与电池仓盖上的标记(○)对齐，然后顺时针转动电池舱盖将其锁住。

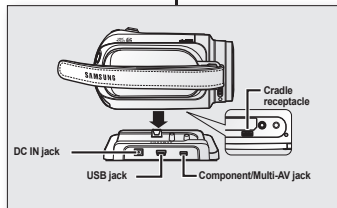
有关纽扣电池的安全防范措施

- 如果更换错误的电池的类型会有爆炸的危险。仅可使用同样或等效型的电池。
- 不要用镊子或者其它金属工具取放电池。因为这样做，会导致电池短路。
- 不要击打，拆卸，加热或者将电池放在水中以免发生爆炸。



将纽扣电池存放在孩子触及不到的地方。
万一吞下电池，请立即咨询医生。

使用多功能支架



多功能支架是一种让摄像机在充电的时候摆放更加平稳或连接其它外部设备的连接板材（电视、个人计算机，等）



- 如果您将摄像机与提供的多功能支架连接，并且使用多种类型的电缆连接用来输出图像，则输出信号的顺序为：USB数据线 → 分量/Multi-AV电缆
- 不要同时连接多条电缆，这样做可能会导致冲突，从而不能正常工作。如果发生此类事情，请将所有连接的电缆拔掉然后再次尝试连接。

preparation

HOLDING THE HD CAMCORDER

Attaching the grip belt

Insert your right hand from the bottom of the HD camcorder up to the base of your thumb. Put your hand in a position where you can easily operate the **Recording start/stop** button, **PHOTO** button, and the **Zoom** lever. Adjust the length of grip belt so that the HD camcorder is stable when you press the **Recording start/stop** button with your thumb.

1. Detach the belt.
2. Adjust the length of grip belt and attach it.

Angle Adjustment

Rotate the swivel handle at the most convenient angle. You can rotate it downward from 10° to 150°.

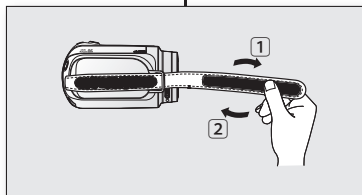


Please be careful not to turn the swivel handle backward as it may cause damage.

准备

握住高清数码摄像机

手带



将手从摄像机底部插入手带并将手指放在基本操作位置。
将手放在可以轻松碰到**录制开始 / 停止按钮**、**PHOTO**按钮和**变焦控制杆**的位置。
调整手带长度以便您在利用手指操作**录制开始 / 停止按钮**的时候，高清数码摄像机处于稳定状态。

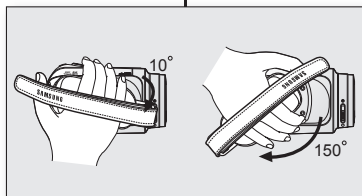
1. 解开手带。
2. 调整手带长度，然后将其粘合。

调整角度

掀动镜头至使用起来最方便的角度。
您可以将它向下转动 10° 到 150°。



请注意不要向后旋转接头，以免造成损坏。



CHARGING THE BATTERY PACK

- Use **IA-BP85ST** battery pack only.
- The battery pack may be charged a little at the time of purchase.
- Be sure to charge the battery pack before you start using your HD camcorder.

Inserting the battery pack

1. Slide and open the battery pack cover as shown in the diagram.
2. Insert the battery pack into the battery pack slot until it softly clicks.
 - Make sure that word mark (SAMSUNG) is facing down while the set is placed as shown in the diagram.
3. Slide and close the battery pack cover.

Charging the battery pack

1. Slide the **POWER** switch downwards to turn off the power.
2. Open the DC IN jack cover and connect the AC power adaptor to the DC IN jack.
3. Connect the AC power adaptor to a wall socket.
4. Once charged, disconnect the AC power adaptor from the DC IN jack on your HD camcorder.
 - Even with the power switched off, the battery pack will still discharge if it is left inserted in the HD camcorder.

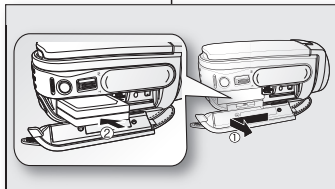


- You can also charge with the cradle. ➡ page 11
- It is recommended you purchase one or more additional battery packs to allow continuous use of your HD camcorder.

Use only Samsung-approved battery packs. Do not use batteries from other manufacturers. Otherwise, there is a danger of overheating, fire or explosion. Samsung is not responsible for problems occurring due to using unapproved batteries.

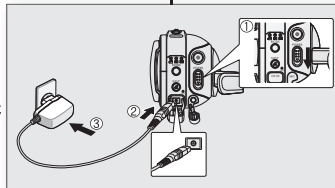
为电池组充电

- 仅可使用 **IA-BP85ST** 电池组。
- 在购买的时候电池组也许存有一些电量。
- 请您务必在开始使用高清数码摄像机之前为电池组充电。



插入电池组

1. 依照图中所示，打开电池组插槽。
2. 将电池组插入电池组插槽，直到被轻轻扣住。
 - 插入电池组时，请将（SAMSUNG）文字标志面朝下，如图所示。
3. 关闭电池组插槽盖。



为电池组充电

1. 向下滑动 **POWER** 电源开关关闭电源。
2. 打开 DC IN 接口盖并且将交流电源适配器连接至 DC IN 接口。
3. 将交流电源适配器的插销插入墙壁的插座上。
4. 充电后，请将交流电源适配器从高清数码摄像机上的 DC IN 接口拔出。
 - 即使电源为关闭状态，如果电池组仍然保留在摄像机内，那么电池组也仍然会释放能量。



- 您还可以通过多功能支架充电。➡ 第11页
- 为了保证您能够持续使用摄像机，建议您另外购买一块或多块电池组备用。

仅使用通过三星验证的电池组。不要使用其他厂商的电池组。否则，有引起过热，起火或者爆炸的危险。由于使用未经许可的电池组而引发的事故，三星公司概不负责。

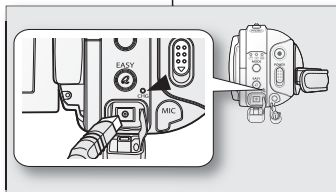
preparation

准备

Charging indicator

The color of the LED indicates the power or charging state.

- If the battery pack has been fully charged, the charge indicator is green.
- If you are charging the battery, the color of the charge indicator is orange.
- If an error occurs while the battery pack in charging, the charging indicator blinks green.



<Charging indicator>

充电指示灯

LED 指示灯的颜色表示电量或充电的状态。

- 如果电池组已经充满电，充电指示灯显示为绿色。
- 如果电池组为充电中，充电指示灯的颜色为橙色。
- 如果电池组在充电过程中出现异常，充电指示灯为绿色并且闪烁。

Charging, recording and playback times with a fully charged battery pack (with no zoom operation, LCD open, etc.)

Battery type	IA-BP85ST	
Charging time	approx. 80 min	
Recording format	Continuous recording time	Playback time
HD	approx. 80 min	approx. 100 min
SD	approx. 85 min	approx. 110 min

- Measured times shown above are based on model SC-HMX10A. (Times for SC-HMX10/HMX10C/HMX10N/HMX10CN/HMX10ED are almost the same)
- The time is only for reference. Figures shown above are measured under Samsung's test environment, and may differ from your actual use.
- The recording time shortens dramatically in a cold environment. The continuous recording times in the operating instructions are measured using a fully charged battery pack at 25 °C (77 °F). As the environmental temperature and conditions vary, the remaining battery time may differ from the approximate continuous recording times given in the instructions.

基于使用满电电池组的充电时间，录制时间和播放的时间（无调焦，打开 LCD 显示屏等操作。）

电池组种类	IA-BP85ST	
充电时间	约 80 分钟	
录制格式	连续录制时间	播放时间
HD	约 80 分钟	约 100 分钟
SD	约 85 分钟	约 110 分钟

- 以上显示的测试时间是基于型号为SC-HMX10A的基础上测出的。(SC-HMX10/HMX10C/HMX10N/HMX10CN/HMX10ED支持的时间与之几乎相同。)
- 此时间值仅作参考。以上表中的测试结果是在三星的测试环境下测出的，用户的实际使用情况也许会与其不同。
- 在寒冷的环境温度下，录制时间会急速缩短。操作说明中提供的连续录制时间是根据在25 °C (77 °F)温度下使用完全充电的电池组所得的结果。当环境温度和周围条件有变化时，实际的时间可能会与测试的近似时间有所不同。

Continuous recording (without zoom)

The times shown in the table reflect the available recording time when the HD camcorder is in the recording mode without using any other functions. In actual recording, the battery pack may discharge 2-3 times faster than this reference since the Record start/stop and Zoom are being operated, and playback is performed. Assume that the recordable time with a fully charged battery pack is between 1/2 and 1/3 of the time in the table, and enough battery packs to allow for the time you are planning to record on the HD camcorder.

Note that the battery pack discharges faster in a cold environment.



- The charging time will vary depending on the remaining battery level.
- To check the remaining battery charge, press and hold the **Display** (I□)/i/CHECK button. → page 22

Ejecting the battery pack

- Slide and open the battery pack cover.
- Slide the **BATT. RELEASE** switch and pull out the battery pack.
 - Gently slide the **BATT. RELEASE** switch in the direction as shown in the diagram.
- Slide and close the battery pack cover.



- Additional battery packs are available at your local Samsung dealer.
- If the HD camcorder will not be in use for a while, remove the battery pack from the HD camcorder.

About battery packs

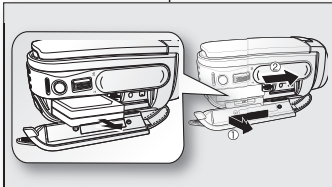
- The battery pack should be recharged in an environment that is between 32°F (0°C) and 104°F (40°C). However, when it is exposed to cold temperatures (below 32°F (0°C)), its usage time becomes reduced and it may cease to function. If this happens, place the battery pack in your pocket or other warm, protected place for a short time, then re-insert in the HD camcorder.
- Do not put the battery pack near any heat source (i.e. fire or a heater).
- Do not disassemble, apply pressure to, or heat the battery pack.
- Do not allow battery pack terminals to be short-circuited. It may cause leakage, heat generation, induce overheating or fire.

连续录制（无调焦操作）

以上表中列出的连续录制时间是当高清数码摄像机在录制模式下启动录制功能，并且没有任何其他操作的情况下测出的结果。在实际录制时，因为操作录制开始 / 停止和变焦，并且一直执行播放，电池组释放能量 2-3 次，实际时间也许比参考值短。假设一块充电完全的电池组的可录制时间是表中 1/2 和 1/3 之间的时间，电池组的备用种类和组数决定录制的时间。注意在寒冷的环境中，电池组会更快地消耗电量。



- 实际充电时间会根据电池组剩余电量的不同而有所变化。
- 检查电池组的残余电量，请按 **显示按钮** (I□)/i/CHECK。
→ 第22页



取出电池组

- 打开电池组插槽盖。
- 滑动**电池组卡扣**，拉出电池组。
 - 依照图中所示的方向，柔和地滑动**电池组卡扣**。
- 关闭电池组插槽盖。



- 请到您所在地区的三星经销商另外购买可使用的电池组。
- 如果一段时间不使用高清数码摄像机，请将电池组从摄像机中取出。

有关电池组

- 电池组的优点：电池组体积小但却拥有很大的电量。电池组的充电环境应介于 32°F (0°C) 和 104°F (40°C) 之间。从而，如果将电池组暴露在温度很低的环境 (低于 32°F (0°C)) 中，它的使用寿命将会减少并且可能停止工作。如果出现此事，请将电池组放入您的衣服口袋或者其他温暖的地方一段时间，然后再把电池组重新安装回高清数码摄像机。
- 请勿将电池组放在任何热源附近。（例如火或者加热器。）
- 禁止拆卸，挤压或者加热电池组。
- 请勿使电池组终端短路。这可能会导致电池组漏液，发热，引起过热或者火灾。

preparation

Maintaining the battery pack

- The recording time is affected by temperature and environmental conditions.
- We recommend only using the original battery pack that is available from your Samsung retailer. When the battery reaches the end of its life, please contact your local dealer. The batteries have to be treated as chemical waste.
- Make sure that the battery pack is fully charged before starting to record.
- To preserve battery power, keep your HD camcorder turned off when you are not operating it.
- Even when the power is switched off, the battery pack will still discharge if it is left inserted to the HD camcorder. When not using the HD camcorder for an extended time period, preserve it with the battery completely separated.
- For power saving purposes, the HD camcorder will automatically turn off after 5 minutes in standby mode. (Only if you set "Auto Power Off" from the menu to on ("5 min").)
- When fully discharged, a battery pack damages the internal cells. The battery pack may be prone to leakage when fully discharged. Charge the battery pack at least once every 6 months to prevent complete discharge of the battery pack.

About the battery life

Battery capacity decreases over time and through repeated use. If decreased usage time between charges becomes significant, it is probably time to replace it with a new one.

Each battery's life is affected by storage, operating and environmental conditions.

Using the HD camcorder with the AC power adaptor

It is recommended that you use the AC power adaptor to power the HD camcorder from a household AC outlet when you perform settings on it, play back, or edit images, or use it indoors. ➔ page 13



- Before detaching the power source, make sure that the HD camcorder's power is turned off. Failure to do so can result in camcorder malfunction.
- Use a nearby wall outlet when using the AC power adaptor. Disconnect the AC power adaptor from the wall outlet immediately if any malfunction occurs while using your HD camcorder.
- Do not use the AC power adaptor in a narrow space, such as between a wall and furniture.

准备

保养电池组

- 录制时间会受温度和环境条件的影响。
- 建议您使用购买高清数码摄像机的销售商售卖的原厂 Samsung 电池组。当电池组的使用寿命接近尾声的时候，请您与当地经销商联系。废弃的电池组必须当作化学制品废物处理。
- 请确保在开始录制之前电池组为充满电的状态。
- 当您不使用数码摄像机时请关闭电源，以保存电池组电量。
- 即使电源已经关闭，如果电池组继续保留在摄像机内，电池组也仍然会释放电量。当一段时间不使用数码摄像机时，请将电池组取出。
- 为节约电量，在待机模式下高清数码摄像机机会在5分钟之内自动关闭。（仅当您在菜单处设置“Auto power off”(自动断电)为“5 min”(5分钟时)。
- 过分释放能量容易损坏电池组内部结构。过分释放能量也许会导致电池组漏液。建议您至少每6个月为电池组充一次电，并将电池组电量完全消耗殆尽。

关于电池组的使用寿命

电池组随着时间的推移和反复地使用，如果可以使用的寿命明显大大地减少，那么大概是什么时候需要更新一块新的电池组了。每一块电池的使用寿命取决于存放，使用，以及环境条件。

使用有交流电源适配器的高清数码摄像机

当您在高清数码摄像机上进行设置、播放或在室内使用时，建议您使用交流电源适配器从室内交流电插座为其供电。➔ 第 13 页



- 在拔出电源之前，请确保高清数码摄像机的电源已经关闭。疏忽此问题，很可能会导致摄像机出现故障。
- 请使用附近的墙壁电源插座，如果发生故障，请立刻将交流电源适配器从墙壁的插座上拔出。
- 不要在狭小的空间内使用交流电源适配器，例如家具与墙壁之间的空隙。

BASIC HD CAMCORDER OPERATION

Set the appropriate operation mode according to your preference using the **POWER** switch and **MODE** button.

Turning the HD camcorder on and off

You can turn the camcorder on or off by sliding the **POWER** switch downward.



- Set the date and time when using your HD camcorder for the first time. ➤ page 25
- When you use your HD camcorder for the first time or you reset it, you will see the "Date/Time Set" menu for the startup display. If you do not set the date and time, the date and time setting screen appears every time you turn on your camcorder.

Setting the operating modes

- You can switch the operating mode in the following order each time you press the **MODE** button.
Movie mode (🎥) → Photo mode (📷) → Play mode (🔍) → Movie mode (🎥)
- Each time the operational mode changes, the respective mode indicator lights up.
 - Movie mode (🎥): To record movie images. ➤ page 31
 - Photo mode (📷): To record photo images. ➤ page 33
 - Play mode (🔍): To play movie or photo images, or edit them. ➤ page 38
- When the HD camcorder is turned on, the self-diagnosis function operates and a message may appear. In this case, refer to "Warning indicators and messages" (on pages 96-99) and take corrective action.
- Movie mode is set by default with the power on.

System Reset

If the HD camcorder does not operate normally, perform "System Reset". The HD camcorder may recover to normal. "System Reset" will reset all settings to factory defaults. The date and time will also be reset. Set the date and time again before using the HD camcorder.

- Turn the HD camcorder off.
 - Remove the battery pack or AC adaptor.
- Use a fine tipped pen to hold down the **RESET** button.
 - All settings will be reset.



Do not press the **RESET** button with undue force.

高清数码摄像机的基本操作

根据您的需要使用 **POWER** 电源开关和 **MODE** 模式按钮选择适当的操作方式。

打开或关闭高清数码摄像机

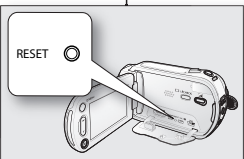
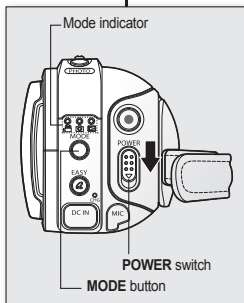
向下滑动电源开关 **POWER** 能够打开或者关闭数码摄像机电源。



- 初次使用您的高清数码摄像机时请设置日期和时间。➤第25页
- 当您初次使用或者重新设置您的数码摄像机时，您会在开机后的画面上看到“Date/Time Set”(日期/时间设置)菜单。如果您不设置日期和时间，那么当您每次打开摄像机时，屏幕上都会出现日期和时间设置。

设置操作模式

- 每次按下 **MODE** 模式按钮将会按顺序切换操作模式。
影片模式 (🎥) → 照片模式 (📷) → 播放模式 (🔍) → 影音模式 (🎧)
- 每次切换操作模式，它们各自的指示灯便会亮起。
 - 影片模式 (🎥)：录制影片图像。➤ 第 31 页
 - 照片模式 (📷)：捕获照片图像。➤ 第 33 页
 - 播放模式 (🔍)：播放影音或照片图像，或编辑它们。➤ 第 38 页
- 当高清数码摄像机打开时，自我诊断功能开启并且可能出现一条消息。在这种情况下，参考“警告显示和信息”（第96-99页）获得解决方法。
- 影音模式为电源开启后的默认模式。



系统重新设置

如果不能正常使用高清数码摄像机，执行“系统重新设置”：高清数码摄像机也许会恢复正常。“系统重新设置”会将所有设置还原到出厂设置。日期和时间也会被重新设置：在使用高清数码摄像机之前请再次设置日期和时间。

- 关闭高清数码摄像机。
 - 取出电池组或拔掉电源。
- 用一支完好的圆珠笔向下按下 **RESET** 按钮。
 - 所有设置将被重置。



不要用力过猛按下 **RESET** 按钮。

preparation

SCREEN INDICATORS

Movie record mode

- 1 Movie record mode
- 2 Operating mode (STBY (standby) or ● (recording))
- 3 Time counter (movie recording time) / Self timer*
- 4 Warning indicators and messages
- 5 Remaining recordable time (★)
- 6 Storage media (built-in memory (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only) or memory card)
- 7 Battery info. (remaining battery level/time)
- 8 Movie image quality
- 9 LCD enhancer
- 10 Anti-Shake (EIS)
- 11 LED light*
- 12 Tele macro
- 13 Wind cut
- 14 Back light
- 15 Component out (when component cable is connected.)
- 16 TV type (when component or Multi-AV cable is connected.)
- 17 Menu tab
- 18 Zoom / Digital zoom position*
- 19 Date/Time
- 20 Record/Play mode tab
- 21 Shutter speed*
- 22 Manual exposure*
- 23 Manual focus*
- 24 White balance
- 25 Fader*
- 26 Scene mode (AE) / EASY Q
- 27 Digital effect*

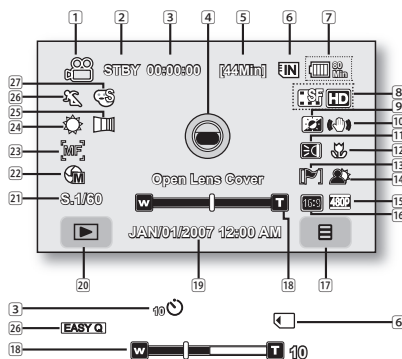


- The OSD indicators are based on memory capacity of 4GB (built-in memory).
- The above screen is an example for explanation: It is different from the actual display.
- Functions marked with * will not be retained when the HD camcorder is powered on after turning it off.
- For enhanced performance, the display indications and the order are subject to change without prior notice.
- (★) The maximum available recording time displayed is 999 minutes even though the actual available recording time exceeds 999 minutes. However, the actual available recording time is not affected by the count displayed. ➡ page 28
For example, when the actual available recording time is "1,066" minutes, "999" will be displayed on the screen.

准备

显示屏指示图标

影音录制模式



- 1 影音录制模式
- 2 操作模式 (STBY (待机) 或 ● (录制))
- 3 计时器 (影音录制时间) / 自动计秒表*
- 4 警示图标和信息
- 5 剩余可录制时间 (★)
- 6 存储介质 (内置存储器 (仅限 SC-HMX10A/HMX10C/HMX10CN/HMX10ED) 或存储卡)
- 7 电池组信息 (剩余电量 / 时间)
- 8 影音图像质量
- 9 LCD 增强器
- 10 防震动 (EIS)
- 11 LED 灯*
- 12 远程微距
- 13 风声消除
- 14 背光补偿
- 15 分量输出 (当分量电缆连接)
- 16 电视类型 (当连接了分量视频线或 Multi-AV 线时。)
- 17 菜单导航
- 18 变焦 / 数字变焦指示条*
- 19 日期 / 时间
- 20 录制 / 播放模式导航
- 21 快门速度*
- 22 手动曝光*
- 23 手动聚焦*
- 24 白平衡
- 25 淡化器*
- 26 场景模式 (AE) / EASY Q
- 27 数字特效*

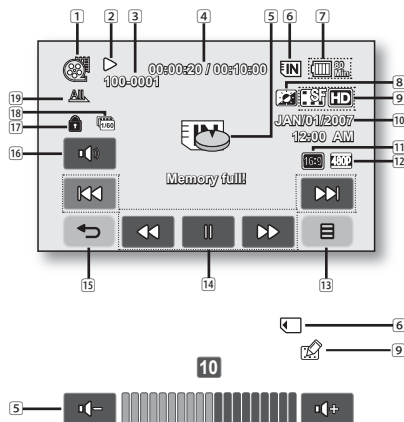


- 以上的 OSD 指示图标是基于 4GB 的存储容量。(内置存储器)。
- 以上的屏幕显示仅为举例：实际显示情况有可能有所不同。
- 标记有 * 符号功能项的预先设置在高清数码相机重新启动之后将不予保留。
- 为使性能更好，显示的指示图标和顺序会随时改变，恕不另行通知。
- (★) 即使实际可录制的时间超过了 999 分钟，出现在屏幕上的可录制时间也能够显示到 999 分钟。然而，屏幕上显示的数字并不代表就是实际可录制的时间。 ➡ 第 28 页
例如：当实际可录制的时间为 "1066" 分钟时，在屏幕上却仍然只显示到 "999" 分钟。

Movie play mode

1	Movie play mode
2	Operating status (Play/Pause)
3	File name (file number)
4	Time code (elapsed time / recorded time)
5	Warning indicators and messages/Volume control
6	Storage media (built-in memory (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only) or memory card)
7	Battery info. (remaining battery level/time)
8	LCD enhancer
9	Movie image quality / Edited movie image indicator (partial delete, divide, combine)
10	Date/Time
11	TV type (when component or Multi-AV cable is connected.)
12	Component out (when component cable is connected.)
13	Menu tab
14	Movie play-related function (Skip / Search / Play / Pause / Slow Playback)
15	Return tab
16	Volume tab
17	Erase protection
18	Cont. Capture
19	Play option

影音播放模式



1	影音播放模式
2	操作状态 (播放 / 暂停)
3	文件名 (文件编码)
4	计时器 (过去的时间 / 录制的时间)
5	警示图标和信息 / 容量控制
6	存储介质 (内置存储器 (仅限 SC-HMX10A/HMX10C/HMX10CN/HMX10ED) 或存储卡)
7	电池组信息 (剩余电池电量 / 时间)
8	LCD 增强器
9	影音图像质量 / 已编辑影片图像指示符 (部分删除、分割、合并)
10	日期 / 时间
11	电视类型 (当连接了分量视频线或 Multi-AV 线时。)
12	分量输出 (当分量电缆被连接)
13	菜单导航
14	与影音播放有关的功能 (跳过 / 搜索 / 播放 / 暂停 / 慢速播放)
15	返回导航
16	音量导航
17	删除保护
18	连续捕捉
19	播放选项



The tabs disappear from the screen after about 3 seconds. They reappear when you touch any point on the screen.

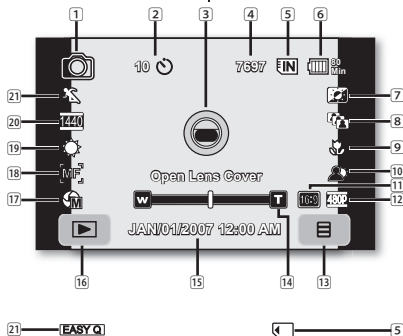


大约 3 秒种之后屏幕上显示的导航键消失。当您再次按下屏幕上的任何一点时，它们将会再次出现。

preparation

Photo record mode

- 1 Photo record mode
- 2 Self timer*
- 3 Warning indicators and messages
- 4 Image counter (total number of recordable photo images) (★)
- 5 Storage media
(built-in memory (SC-HMX10A/
HMX10C/HMX10CN/HMX10ED only)
or memory card)
- 6 Battery info. (remaining battery level/time)
- 7 LCD enhancer
- 8 Cont. shot
- 9 Tele macro
- 10 Back light
- 11 TV type (when component or Multi-AV
cable is connected.)
- 12 Component out (when component
cable is connected.)
- 13 Menu tab
- 14 Zoom position*
- 15 Date/Time
- 16 Record/Play mode tab
- 17 Manual exposure*
- 18 Manual focus*
- 19 White balance
- 20 Resolution
- 21 Scene mode (AE) / EASY Q



准备

拍照模式

- 1 拍照模式
- 2 自拍延时器*
- 3 警示图标和信息
- 4 图像计数器 (可拍照片总数) (★)
- 5 存储介质
(内置存储器 (仅限 SC-HMX10A/
HMX10C/HMX10CN/HMX10ED) 或存
储卡)
- 6 电池组信息 (剩余电池电量 / 时间)
- 7 LCD 增强器
- 8 连续拍摄
- 9 远程微距
- 10 背光补偿
- 11 电视类型 (当连接了分量视频线或 Multi-
AV 线时。)
- 12 分量输出 (当分量电缆连接时)
- 13 菜单导航
- 14 变焦指示条*
- 15 日期 / 时间
- 16 录制 / 播放模式导航
- 17 手动曝光*
- 18 手动聚焦*
- 19 白平衡
- 20 分辨率
- 21 场景模式 (AE) / EASY Q



(★) The maximum number of recordable images displayed is 99,999 even though the actual number of recordable images exceeds 99,999. However, the actual number of recordable images is not affected by the count displayed. ➡ page 28
For example, when the actual number of recordable images is "156,242", "99,999" will be displayed on the screen.

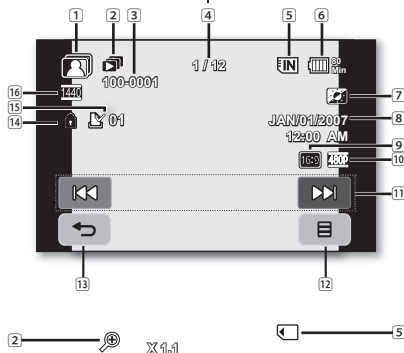


(★) 即使实际可拍摄的照片图像超过了99,999张, 出现在屏幕上的可拍摄照片图像的数量也仅能够显示到99,999张。然而, 屏幕上显示的数字并不代表就是实际可拍摄照片图像的数量。➡第28页
例如: 当实际可拍摄照片图像的数量为 "156,242" 张时, 屏幕上却仍然只显示到 "99,999" 张。

Photo play mode

- 1 Photo play mode
- 2 Slide show / Playback zoom
- 3 File name (file number)
- 4 Image counter
(current image / total number of recorded images)
- 5 Storage media
(built-in memory (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only) or memory card)
- 6 Battery info.
(remaining battery level/time)
- 7 LCD enhancer
- 8 Date/Time
- 9 TV type (when component or Multi-AV cable is connected.)
- 10 Component out (when component cable is connected.)
- 11 Previous image/Next image
- 12 Menu tab
- 13 Return tab
- 14 Erase protection
- 15 Print mark (DPOF)
- 16 Resolution

照片查看模式



- 1 照片查看模式
- 2 幻灯片放映 / 播放变焦
- 3 文件名 (文件编号)
- 4 图像计数器
(当前图像 / 拍摄的图像总数)
- 5 存储介质
(内置存储器 (仅限 SC-HMX10A/HMX10C/HMX10CN/HMX10ED) 或存储卡)
- 6 电池组信息 (剩余电池电量 / 时间)
- 7 LCD 增强器
- 8 日期 / 时间
- 9 电视类型 (当连接了分量视频线或 Multi-AV 线时。)
- 10 分量输出 (当分量电缆连接时)
- 11 上一个图像 / 下一个图像导航
- 12 菜单导航
- 13 返回导航
- 14 删除保护
- 15 打印标记 (DPOF)
- 16 分辨率

preparation

准备

USING THE DISPLAY (I) / iCHECK BUTTON

Switching the information display mode

You can switch between the on-screen information display modes:

Press the **Display (I) / iCHECK** button.

The full and minimum display modes will alternate.

- Full display mode: All information will appear.
- Minimum display mode: Only operating status indicator will appear.

If the HD camcorder has warning information, a warning message will appear.

Checking the remaining battery and recording capacity

- When the power is on, press and hold the **Display (I) / iCHECK** button.
- When the power is off, press the **Display (I) / iCHECK** button.
- After a while, the battery time and approximate recordable time according to the storage and quality appear for about 10 seconds. If a storage media is not inserted, its icon does not appear.

 **Display (I) / iCHECK** button does not work in the menu or quick menu screen.

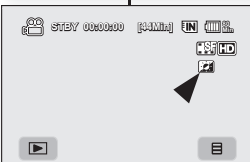
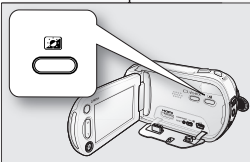
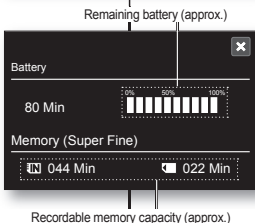
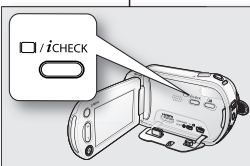
USING THE LCD ENHANCER (E)

Contrast is enhanced for a clear and bright image. This effect is also implemented outdoors in bright daylight.

- Press the **LCD enhancer (E)** button.
 - The **(E)** indicator is displayed.
- To exit LCD enhancer, press the **LCD enhancer (E)** button again.



- LCD enhancer function does not affect the quality of the image being recorded.
- When LCD enhancer works at the low illumination, some stripes may occur on the LCD screen. It is not a malfunction.



使用屏幕显示 (I) / iCHECK 按钮

切换到信息显示模式

您可以切换屏幕信息的显示模式:

按下屏幕显示(I)/iCHECK按钮。

将交替显示完全显示模式和最小显示模式。

- 完全显示模式: 将出现所有类型的信息。
- 最小显示模式: 将仅显示操作状态指示灯。

如果高清摄像机有预警信息,则屏幕上会显示一条警示消息。

检查剩余的电池电量和录制容量

- 当电源为开启状态时,按住屏幕显示(I)/iCHECK按钮。
 - 在电源已关闭的情况下,按下显示(I)/iCHECK按钮。
 - 一小会后,根据存储器和质量,电池时间和大约可录制时间将显示约10秒钟。
- 如果不插入存储介质,则其图标将不会出现。

 **显示(I)/iCHECK**按钮在菜单或快捷菜单屏幕中不起作用。

使用 LCD 增强器 (E)

反差增强,得到清晰明亮的图像。该作用也被运用于户外的白天。

- 按下**LCD增强器(E)**按钮。
 - 屏幕上显示该功能的指示图标(E)。
- 退出LCD增强,再次按下**LCD增强器(E)**按钮。



- 使用LCD增强功能并不影响录制的图像质量。
- 在低照度环境下使用LCD增强器时,LCD显示屏上会出现一些条纹。这并不是故障。

USING THE LCD SCREEN

Adjusting the LCD screen

1. Open up the LCD screen 90° with your finger.
2. Rotate it to the best angle to record or play.



Do not lift the HD camcorder by holding the LCD screen.

WARNING



- Over-rotation may cause damage to the inside of the hinge that connects the LCD screen to the HD camcorder.
- See page 67 to adjust brightness and contrast of the LCD screen.

Using the touch panel

You can play recorded images and set the functions by using the touch panel. Place your hand on the rear side of the LCD panel to support it. Then, touch the items displayed on the screen.



- Be careful not to press the buttons nearby the LCD panel accidentally while using the touch panel.
- The tabs and indicators that appear on the LCD panel depend on the recording/playback status of your HD camcorder at the time.
- The touch screen may malfunction because of the LCD protection film is that is adhered to it when purchasing the product. Remove and discard the protection film before using.

使用 LCD 显示屏

调整LCD显示屏

1. 呈90°打开LCD显示屏。
2. 转动到最佳角度进行录制或者播放。

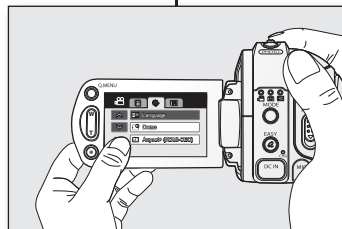
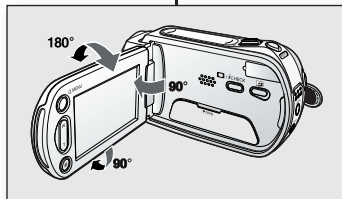


不要握着LCD显示屏举起数码摄像机。

警告



- 转动一周会导致内部连接LCD显示屏和高清数码摄像机之间的铰链损坏。
- 参见第67页,调整LCD显示屏的亮度和颜色。



使用触控控制板

您可以通过使用触控控制板进行播放录制的图像,以及设置一些功能项。用手在LCD控制板的后面支撑,然后再用手指触碰屏幕上显示的选项。



- 请注意当使用触控控制板的时候不要偶然地触碰LCD控制板区的按钮。
- 在LCD控制板上显示的导航键和指示图标取决于当时您的高清数码摄像机所处的录制/播放状态。
- 触摸屏可能会因LCD保护膜(购买产品时贴上去的)而功能异常。请在使用之前撕下保护膜。

preparation

INITIAL SETTING: OSD LANGUAGE & DATE AND TIME

To read the menus or messages in your desired language, set the OSD language. To store the date and time during record, set the date/time.

Selecting the OSD language

You can select the desired language to display the menu screen and the messages.

1. Touch the Menu () tab.
2. Touch the Settings () tab.
3. Touch the up ()/down () tab until "Language" is displayed.
4. Touch the "Language", then touch the desired OSD language.
5. To exit, touch the Exit () tab or Return () tab repeatedly until menu disappears.
 - The OSD language is refreshed in the selected language.

- Even if the battery pack or AC power are removed, the language setting will be preserved.
- "Language" options may be changed without prior notice.

准备

初次设置 : OSD 语言 & 日期和时间

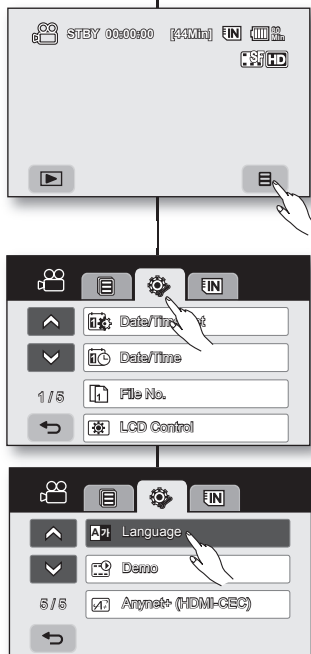
设置OSD语言,用您需要的语言阅读菜单和信息。设置日期/时间,在录制的过程中保留下日期和时间。

选择OSD显示语言

您可以选择您所需要的语言显示菜单和信息。

1. 触摸菜单导航 ()。
2. 触摸设置导航 ()。
3. 触摸上 ()/下 () 移动导航, 直到显示 "Language" 选项。
4. 触摸 "Language" 选项, 然后触摸选择需要的 OSD 语言。
5. 退出设置, 触摸退出导航 () 或者反复触摸返回导航 () 直到菜单消失。
 - OSD语言被刷新为所选的语言。

- 即使取出电池组或拔掉电源适配器, 语言设置也会被保存。
- "Language" 选项也许改变,恕不另行通知。



Setting the date and time

Set the date and time when using this HD camcorder for the first time.

1. Touch the Menu () tab.
2. Touch the Settings () tab.
3. Touch the up ()/down () tab until "Date/Time Set" is displayed.
4. Touch "Date/Time Set."
5. Touch the up ()/down () tab to set current month, then touch day field.
6. Set values for day, year, hour, minute, and AM/PM as in setting the month.
7. Touch the OK () tab when the date and time setting is completed.
 - The message "Date/Time Changed" appears, the set date/time is applied.
8. To exit, Return () tab repeatedly until menu disappears.



- **On charging the built-in rechargeable battery**
Your camcorder has a built-in rechargeable battery to retain the date, time, and other settings even when the power is off. The built-in rechargeable battery is always charged while your camcorder is connected to the wall outlet via the AC power adaptor or while the battery pack is attached. The rechargeable battery will be fully discharged in about 6 months if you do not use your camcorder at all. Use your camcorder after charging the pre-installed rechargeable battery. If the built-in rechargeable battery is not charged, any input data will not be backed up and the date/time appears on the screen as "JAN/01/2007 12:00 AM" (when "Date/Time" display to On).
 - You can set the year up to 2037.

Turning the date and time display on/off

To switch the date and time display on or off, access the menu and change the date/time display mode. ➡ page 66

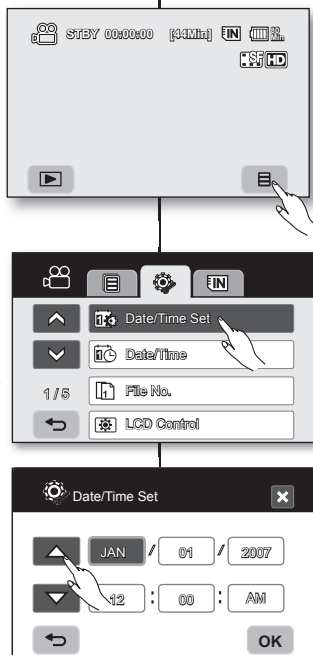
设置日期和时间

当您第一次使用本摄像机时请设置日期和时间。

1. 触摸菜单导航 ()。
2. 触摸设置导航 ()。
3. 触摸上 ()/下 () 导航直到显示 "Date/Time Set" (日期/时间设置)。
4. 触摸 "Date/Time Set" (日期/时间设置)。
5. 触摸向上 ()/向下 () 导航以设置当前月份，然后触摸选择年份。
6. 与设置月份的方法相同，分别设置日、年、小时、分钟和上午/下午。
7. 日期和时间设置完成后，触摸 () OK 导航确认。
 - 日期/时间设置完成后，屏幕显示 "Date/Time changed." (日期/时间已更改) 的信息。
8. 要退出，重复按返回 () 直到菜单消失为止。



- **为内置蓄电池充电**
您的摄像机拥有内置可再充电电池用来在关闭电源后保存日期、时间以及一些其它的设置。在摄像机通过交流电源适配器连接到壁装插座或者安装了电池组后，内置可再充电电池处于一直被充电的状态。如果您长时间不使用摄像机，该可再充电电池的电量在大约6个月的时候就会消耗完。请在将可再充电电池充满电之后再使用您的摄像机。如果内置可再充电电池没有电量，一些保留的数据便会消失并且日期和时间便会显示为 "01/01/2007 12:00 上午" (当 "Date/Time" (日期/时间) 显示功能为打开状态)。
 - 您可以设置的最高年份是2037年。



关闭日期和时间显示

进行切换日期和时间显示开或关，请访问菜单并且更改日期/时间显示模式。 ➡ 第66页

before recording

SELECTING THE STORAGE MEDIA (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only)

You can record movie and photo images on the built-in memory or a memory card, so you should select the desired storage media before starting recording or playback.

Using the built-in memory

- Because this HD camcorder has an embedded memory, you do not need to buy any extra storage media. So you can take or playback movie/photo images conveniently.
- If you use a built-in memory to make a recording, touch the Menu () tab → Storage () or () tab → "Memory."

Using a memory card (not supplied)

- This HD camcorder has multi card-slot for access to SDHC (Secure Digital High Capacity) and MMCplus cards.
- You can use SDHC and MMCplus cards on your HD camcorder. (Some cards are not compatible depending on the memory card manufacturer and memory card type.)
- Before inserting or ejecting the memory card, turn the HD camcorder off.
- If you use a memory card to make a record, touch the Menu () tab → Storage () or () tab → "Card."



- Never format the built-in memory or memory card using a PC.
- When you insert a memory card, play thumbnail mode or menu display mode, the storage media setup menu appears. Touch "Yes" if you want to use a memory card, or "No" if not.
- Do not remove the power (battery pack or AC power adaptor) during accessing storage media such as recording, playback, format, delete, etc. The storage media and its data may be damaged.
- Do not eject a memory card during accessing memory card such as recording, playback, format, delete etc. The memory card and its data may be damaged.

录制之前

选择存储介质 (仅限 SC-HMX10A/HMX10C/HMX10CN/HMX10ED)

您可以将录制的文件存储在内置存储器或者存储卡上, 所以请在开始录制或者播放前选择您要存储文件的存储介质。

使用内置存储器

- 由于此高清数码摄像机本身具备存储容量, 所以您不需要额外购买任何存储介质。如此, 您可以更方便地记录或者播放移动/录制。
- 如果选择使用内置存储器进行录制, 请触摸菜单导航()→存储介质导航( 或 ) → "Memory"(内置存储器)。

使用存储卡 (未提供)

- 该高清数码摄像机具备有SDHC(Secure Digital High Capacity)和MMCplus存储卡插槽。
- 您的高清数码摄像机可以使用SDHC和MMCplus存储卡。(根据存储卡的制造商和类型的不同, 有些存储卡是不能够使用的。)
- 请在插入或者取出存储卡之前关闭您的数码摄像机。
- 如果选择适用存储卡进行录制, 请触摸菜单导航()→存储介质导航( 或 )→"Card"(存储卡)。
- 不要使用电脑格式化内置存储器和存储卡。
- 插入存储卡时, 播放缩略图模式或菜单显示模式, 存储媒体设置菜单就会出现。如果选择使用存储卡触摸 "Yes"(是), 否则触摸 "No"(否)。
- 在进行录制、播放、格式化、删除等操作时请不要切断电源(电池组或交流电源适配器), 否则存储介质和存储的数据将会损坏。
- 在使用存储卡录制、播放、格式化、删除等操作时, 取出存储卡会造成存储卡本身和存储数据的损坏。



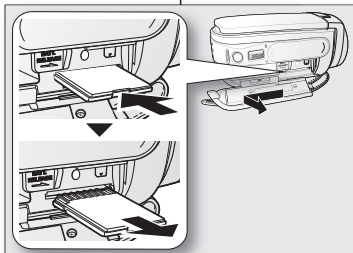
INSERTING/EJECTING A MEMORY CARD

Inserting a memory card

1. Slide and open the memory card cover.
2. Insert the memory card into the slot until it softly clicks.
 - Make sure that the terminal part portion is facing up and the camcorder is placed as shown in the diagram.
3. Slide and close the memory card cover.

Ejecting a memory card

1. Slide and open the memory card cover.
2. Slightly push the memory card inwards to pop it out.
3. Pull the memory card out of the slot and slide and close the memory card cover.



插入存储卡

1. 打开存储卡插槽盖。
2. 将存储卡插入存储卡插槽直到存储卡被轻轻地扣住。
 - 依图所示的摄像机摆放位置,确保终端部分朝上。
3. 关闭存储卡插槽盖。

取出存储卡

1. 打开存储卡插槽盖。
2. 轻轻向内推挤存储卡,存储卡弹出。
3. 拉出存储卡并且关闭存储卡插槽盖。

The HD camcorder supports SDHC and MMCplus memory cards for data storage.

The data storage speed may differ, according to the manufacturer and production system.

- SLC (single-level cell) system: faster write speed is enabled.
- MLC (multi-level cell) system: only lower write speed is supported.

For best results, we recommend using a memory card that supports faster write speed.

Using a lower write speed memory card for recording a movie may cause difficulties with storing the movie on the memory card. You may even lose your movie data during the recording.

In an attempt to preserve any bit of the recorded movie, the HD camcorder forcibly stores the movie on the memory card and displays a warning: **"Low Speed Card. Please record a Lower quality"**

If you are unavoidably using a low speed memory card, lower the recording quality by one level "[HD] Fine," "[HD] Normal."

You have five quality options to record a movie with the HD camcorder: "[HD] Super Fine," "[HD] Fine," "[HD] Normal," "[SD] Standard," and "[SD] Economy." However, the higher the quality, the more memory that will be used.

插入 / 取出存储卡

本高清数码摄像机支持使用SDHC和MMCplus存储卡进行数据保存。

根据制造商和生产系统的不同, 数据存储速度也许会有所不同。

- SLC (单层式存储单元) 系统: 可实现较快的写入速度。
 - MLC (多层式存储单元) 系统: 仅支持较慢的写入速度。
- 为达到最好的效果, 我们建议您选用写入速度较快的存储卡。使用更低写入速度的存储卡保存录制的影音也许会有困难。在录制的过程中可能会丢失一些影音数据。当试图保存已录制影音的一些字节时, 高清数码摄像机将强行将影音文件存储在存储卡上, 并显示一则警告:

"Low speed card. Please record a lower quality."(卡速度低。请以较低质量录制。)

若不得以而使用慢速存储卡, 最好将录制质量降低一级"[HD] Fine"([HD] 清晰) "[HD] Normal"([HD] 标准)。

本高清数码摄像机为您提供五个质量级别进行录制影音: "[HD] Super Fine"([HD] 高清晰) "[HD] Fine"([HD] 清晰) "[HD] Normal"([HD] 标准) "[SD] Standard"([SD] 标准) 和 "[SD] Economy"([SD] 经济)

然而, 文件的质量级别越高, 占用的存储空间越大。

Actual formatted capacity may be less as the internal firmware uses a portion of the memory.

实际格式化后容量可能会小一些, 因为内部固件使用了一小部分存储空间。

before recording

RECORDABLE TIME AND NUMBER OF IMAGES

Recordable time for movie images

Movie quality	Storage media (Capacity)				
	1GB	2GB	4GB	8GB	16GB
[HD] Super Fine	Approx. 11min	Approx. 22min	Approx. 44min	Approx. 88min	Approx. 176min
[HD] Fine	Approx. 14min	Approx. 29min	Approx. 59min	Approx. 118min	Approx. 236min
[HD] Normal	Approx. 22min	Approx. 44min	Approx. 88min	Approx. 177min	Approx. 354min
[SD] Standard	Approx. 33min	Approx. 67min	Approx. 133min	Approx. 266min	Approx. 532min
[SD] Economy	Approx. 67min	Approx. 133min	Approx. 267min	Approx. 533min	Approx. 1066min

Recordable number of photo images

Photo resolution	Storage media (Capacity)				
	1GB	2GB	4GB	8GB	16GB
2048x1536	Approx. 953	Approx. 1906	Approx. 3813	Approx. 7627	Approx. 15254
1440x1080	Approx. 1929	Approx. 3859	Approx. 7719	Approx. 15439	Approx. 30878
640x480	Approx. 9765	Approx. 19530	Approx. 39060	Approx. 78121	Approx. 156242



- The above figures are measured under Samsung's standard recording test conditions and may differ depending on actual use.
- The HD camcorder provides five quality options for movie recordings: "[HD] Super Fine," "[HD] Fine," "[HD] Normal," "[SD] Standard," "[SD] Economy."
- The higher the quality setting, the more memory is used.
- The compression rate increases when choosing lower quality settings. The higher the compression rate is, the longer the recording time will be. However, the image quality will be lower.
- The bit rate automatically adjusts to the recording image, and the recording time may vary accordingly.
- Memory cards of bigger than 32GB in capacity may not work properly.
- The maximum size of a movie file that can be recorded at one time is 2GB.
- To check the remaining memory capacity, press **Display** (I) / **CHECK** button. → page 22
- The maximum available recording time displayed is 999 minutes and the maximum number of recordable images displayed is 99,999.

录制之前

影音录制时间和数量

影音录制时间

影音质量	存储介质 (容量)				
	1 GB	2 GB	4 GB	8 GB	16 GB
[HD] 高清晰	约 11 分钟	约 22 分钟	约 44 分钟	约 88 分钟	约 176 分钟
[HD] 清晰	约 14 分钟	约 29 分钟	约 59 分钟	约 118 分钟	约 236 分钟
[HD] 标准	约 22 分钟	约 44 分钟	约 88 分钟	约 177 分钟	约 354 分钟
[SD] 标准	约 33 分钟	约 67 分钟	约 133 分钟	约 266 分钟	约 532 分钟
[SD] 经济	约 67 分钟	约 133 分钟	约 267 分钟	约 533 分钟	约 1066 分钟

照片拍摄数量

照片分辨率	存储介质 (容量)				
	1 GB	2 GB	4 GB	8 GB	16 GB
2048 × 1536	约 953	约 1906	约 3813	约 7627	约 15254
1440 × 1080	约 1929	约 3859	约 7719	约 15439	约 30878
640 × 480	约 9765	约 19530	约 39060	约 78121	约 156242



- 以上测试结果产生在三星的标准测试条件下，根据环境或者实际使用的情况差异可能会有所不同。
- 为您提供五个质量选项录制影音：“[HD] Super Fine”([HD]高清晰)，“[HD] Fine”([HD]清晰)，“[HD] Normal”([HD]标准)，“[SD] Standard”([SD]标准)，“[SD] Economy”([SD]经济)。”
- 设置的质量越高，占用的存储空间越大。
- 降低质量，压缩率会增加。更高的压缩率是，图片的质量降低，但是录制时间增加。
- 比特率根据录制影音自动调整，而且录制的时间也许会有相应的变化。
- 大于32GB的存储卡可能无法正常工作。
- 一次录制的影音文件最大为2GB。
- 要检查剩余存储容量，按下显示 (I) / **CHECK** 按钮。→ 第22页
- 在屏幕上，能够显示出的可录制时间可达999分钟，可拍摄照片图像的数量可达99,999张。

SELECTING A SUITABLE MEMORY CARD

- You can use a SDHC memory card and MMCplus cards.
 - You can also use a SD memory card, but it is recommended that you use a SDHC memory card and MMCplus with your HD camcorder. (SD card supports upto 2GB.)
- MultiMediaCards (MMC) are not supported.
- On this HD camcorder, you can use memory cards of the following capacity: 128MB ~ 32GB.
- Compatible recording media

The following recording media have been guaranteed to work with this HD camcorder. Others are not guaranteed to work, so buy such products with caution.

 - SDHC or SD memory cards: By Panasonic, SanDisk, and TOSHIBA.
 - MMCplus: By Transcend.
- If other media are used, they may fail to record data correctly, or they may lose data that has already been recorded.
- For movie recording, use a memory card that supports faster write speed (at least 2MB/s).

SDHC (Secure Digital High Capacity) memory card

- SDHC memory card complies with the new SD specification Ver.2.00. This latest specification was established by the SD Card Association to realize data capacity over 2GB.
- The SDHC memory card supports a mechanical write-protection switch. Setting the switch prevents accidental erasure of files recorded on the SDHC memory card. To enable writing, move the switch up to the direction of terminals. To set write protection, move the switch down.
- SDHC memory cards cannot be used with current SD enabled host devices.

MMCplus (Multi Media Card plus)

- In the case of MMCplus, they have no protection tab, so please use the protect function in the menu. ➡page 78

选择适合的存储卡

- 您可以使用SDHC和MMCplus存储卡。
 - 您也可以使用SD存储卡，但是仍然推荐您在该高清数码相机上使用SDHC和MMCplus存储卡。（支持最大为2GB的存储卡。）
- 不支持MultiMediaCards (MMC)存储卡。
- 使用本高清数码相机您可以选择的存储卡存储容量范围为：128MB ~ 32GB。
- 兼容的介质：

列出的介质可以保证本高清数码摄像机的正常运行。其他存储介质不能保证及其的正常运行使用，所以请慎重购买存储介质。

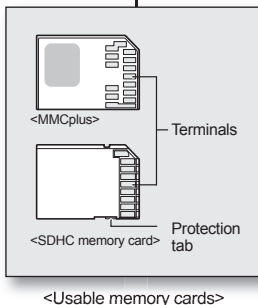
 - SDHC或SD存储卡：由Panasonic, SanDisk, 和 TOSHIBA。
 - 和MMCplus存储卡：由Transcend。
- 如果使用其他存储介质，可能会导致录制的文件丢失或者损坏。
- 建议在录制影音的时候使用写入速度较快的存储卡。（最少2MB/s）。

SDHC (Secure Digital High Capacity) 存储卡

- SDHC存储卡相当于规格为Ver.2.00的新SD卡。该最新的规格已经由SD卡协会证实数据容量在2GB。
- SDHC存储卡具备写保护开关。设置SDHC存储卡的写保护开关以防止文件被偶然删除。设置为可以擦写，由终端向上移动开关。设置写保护，则向下移动开关。
- SDHC存储卡无法被使用在当前可以使用SD卡的设备上。

MMCplus (Multi Media Card plus) 存储卡

- MMCplus存储卡没有写保护片，请在菜单选项设置保护功能。➡第78页



before recording

Common cautions for memory card

- Damaged data may not be recovered. It is recommended you back-up important recordings separately on your PC's hard disk.
- After you modify the name of a file or folder stored in the memory card using your PC, your camcorder may not recognise the modified file.

Handling a memory card

- It is recommended that you switch off before inserting or removing the memory card to avoid data loss.
- It is not guaranteed that you can use a memory card formatted by other devices. Be sure to format your memory card using this camcorder.
- Memory cards need to be formatted on this camcorder before use.
- If you cannot use a memory card that has been previously used with another device, format it on your HD camcorder. Note that formatting erases all information on the memory card.
- A memory card has a certain life span. If you cannot record new data, you have to purchase a new memory card.
- Do not bend, drop, or cause a strong impact to your memory card.
- Do not use or store in a place that has a high temperature and humidity or a dusty environment.
- Do not place foreign substances on the memory card terminals. Use a soft dry cloth to clean the terminals if required.
- Do not put any additional labels on the memory card.
- Be careful to keep the memory card out of the reach of children who might swallow it.

Note on use

- Samsung is not responsible for data loss due to misuse.
- We recommend using a memory card case to avoid losing data from moving and static electricity.
- After a period of use, the memory card may become warm. This is normal, not a malfunction.

录制之前

有关存储卡的注意事项

- 损坏的数据不可以恢复。推荐您将重要的数据另外在电脑上进行备份。
- 如果使用电脑修改文件或者文件夹的名称，数码摄像机也许不能识别被修改后的文件。

存储卡的操作事宜

- 建议您在插入或取出存储卡之前将电源关闭，以免保存的数据丢失。
- 使用其他设备可能无法格式化存储卡。请务必使用本数码摄像机对您的存储卡进行格式化。
- 在使用之前，请使用本数码摄像机对存储卡进行格式化。
- 如果不能使用在其他设备上已经被格式化的存储卡，请使用本数码摄像机对存储卡进行格式化。注意该格式化操作将会删除存储卡上的所有数据。
- 存储卡具有特定的寿命。如果您长时间使用它，您可能无法录制新的资料。在此情况下，您需要购买新的存储卡。
- 请勿将存储卡弯折，掉落或者使它受到强烈的撞击
- 请勿在炎热，多尘或者潮湿的环境中使用或储存。
- 切勿让存储卡的终端堆积异物。如有必要，请用干燥的软布来清洁终端。
- 除了标签，不要在标签粘贴处粘贴其他任何东西。
- 请将存储卡放在儿童触及不到的地方，以免被儿童误吞。

注意

- 由于操作错误导致的数据丢失，三星公司概不负责。
- 为了防止由于挪动存储卡以及静电造成的数据丢失，我们建议您适用存储卡盒。
- 使用过一段时间之后，存储卡可能会发热。这是正常现象，不是故障。

recording

Basic procedures to record a movie or photo image are described below and on the following pages.

RECORDING MOVIE IMAGES

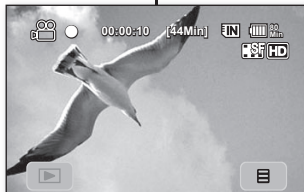
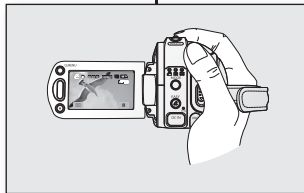
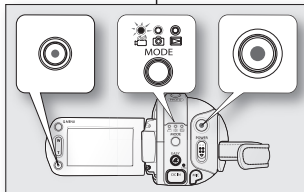
- You can record movie images in Movie mode only. ↪page 17
- This HD camcorder provides two **Recording start/stop** buttons. One is on the rear side of the camcorder and the other is on the LCD panel. Select the **Recording start/stop** button that works best for you.
1. Turn the HD camcorder on.
 - Connect a power source to the HD camcorder. (A battery pack or an AC power adaptor) ↪page 13,16
 - Slide the **POWER** switch downward to turn the HD camcorder on.
 - Set the appropriate storage media. (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only) ↪page 26 (If you want to record on a memory card, insert the memory card.)
2. Check the subject on the LCD screen.
 - Set the **Lens open/close** switch to open (O). ↪page 8
3. Press the **Recording start/stop** button.
 - The recording (●) indicator will display, and recording will start.
 - To stop recording, press the **Recording start/stop** button again.
4. When recording is finished, turn the HD camcorder off.

录制

以下为您介绍录制影音文件的基本操作步骤。

录制影音文件

- 仅可以在影音模式下录制影音图像。↪第17页
- 本高清数码摄像机为您提供两个**录制开始/停止按钮**。一个在数码摄像机的背面，另一个在LCD控制板上。根据用途选择适合操作的**录制开始/停止按钮**。
1. 开启高清数码摄像机。
 - 连接电源至高清数码摄像机。(安装电池组或连接交流电源适配器) ↪第13,16页
 - 向下滑动**POWER**电源开关开启高清数码摄像机。
 - 选择适当的存储介质。(仅限SC-HMX10A/HMX10C/HMX10CN/HMX10ED) ↪第26页 (如果您想使用存储卡记录文件, 请插入存储卡。)
2. 对准想要录制的主题。
 - 将**镜头开/关转换器**切换到打开状态(O)。↪第8页
3. 按下**录制开始/停止按钮**。
 - 屏幕上显示正在录制的指示图标(●), 并且开始进行录制。
 - 再次按下**录制开始/停止按钮**, 停止录影。
4. 完成录制, 关闭数码摄像机。



recording



- Movie images are compressed in H.264 (MPEG-4.AVC) format.
- Eject the battery pack when you have finished recording to prevent unnecessary battery power consumption.
- For on-screen information display, see page 18.
- For approximate recording time, see page 28.
- You can record movie images using the remote control.
- Sound is recorded from the internal stereo microphone on the front of the HD camcorder. Take care that this microphone is not blocked.
- Before recording an important movie, make sure to test the recording function by checking if there is any problem with the audio and video recording.
- For various functions available during recording, see "RECORDING MENU ITEMS" on pages 52-64.
- Do not operate the power switch or remove the memory card while accessing the storage media. Doing so may damage the storage media or the data on storage media.
- If the power cable/battery is disconnected or recording is disabled during recording, the system is switched to the data recovery mode. While data is being recovered, no other function is enabled. After data recovery, the system will be switched to the STBY mode. When the recording time is short, the data may fail to be recovered.
- Settings and Storage menu are not available during recording.

录制



- 影音图像被压缩在H.264(MPEG-4.AVC)格式。
- 为防止电池电量的耗费，建议您在完成录制之后将电池组取出。
- 屏幕上显示信息。请参见第18页。
- 录制时间的近似值。请参见第28页。
- 您可以使用遥控器录制影音图像。
- 高清数码相机的内置麦克风记录声音。请注意麦克风前面不要有任何遮挡。
- 录制一段重要的影音文件之前，请对录制功能进行测试。确保音频和视频录制没有任何问题。
- 在录制影音文件的时候可使用的功能。参见第52-64页的“录制菜单选项”。
- 在访问存储介质的时候不要开关电源或者移动存储卡。那样做会损坏存储卡中的数据或者对存储卡本身造成损坏。
- 如果在录制期间拔下电源线/拆下电池或不能进行录制，系统就会切换到数据恢复模式。在恢复数据的过程中，其它功能不可使用。在数据恢复后，系统将会切换到待机模式。如果录制时间很短，则可能无法转换数据。
- 设置和存储菜单在录制的过程中不起作用。

TAKING PHOTO IMAGES

- You can take photo images in Photo mode only. ➞ page 17

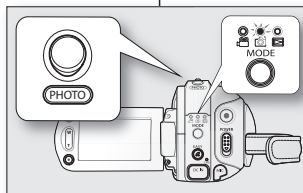
1. Slide the **POWER** switch downwards to turn on the power and press the **MODE** button to set Photo (). ➞ page 17
 - Set the appropriate storage media.
(SC-HMX10A/HMX10C/HMX10CN/HMX10ED only) ➞ page 26
(If you want to record on a memory card, insert the memory card.)
2. Check the subject on the LCD screen.
 - Set the **Lens open/close** switch to open (O). ➞ page 8
3. Press the **PHOTO** button halfway down (half press).
 - The HD camcorder automatically focuses on the subject at the center of screen (when auto focus is selected).
 - When the image is in focus, the (●) indicator is displayed in green.
4. Press the **PHOTO** button fully down (full press).
 - A shutter sound is heard. When the (▶▶▶) indicator disappears, the photo image has been recorded.
 - While saving the photo image on the storage media, you cannot proceed with the next recording.



- The number of photo images that can be stored depending on the image quality or the image size. For details, see page 28.
- The photo image is taken only in the 4:3 aspect ratio as shown in the right illustration.
- Audio will not be recorded with the photo image on the storage media.
- If focussing is difficult, use the manual focus function. ➞ page 56
- Do not operate the **POWER** switch or remove the memory card while accessing the storage media. Doing so may damage the storage media or the data on storage media.
- Photo image files recorded by your HD camcorder conform to the "DCF (Design rule for Camera File system)" universal standard established by the JEITA (Japan Electronics and Information Technology Industries Association). DCF is an integrated image-file format for digital cameras: Image files can be used on all digital devices conforming to DCF.

拍摄照片

- 仅可以在拍照模式下拍摄照片图像。➞第17页



1. 向下滑动**POWER**电源开关，打开电源并且按下**MODE**模式按钮设置到照片模式 ()。➞第17页
 - 选择适当的存储介质。
(仅限SC-HMX10A/HMX10C/HMX10CN/HMX10ED) ➞第26页 (如果您想使用存储卡记录文件, 请插入存储卡。)
2. 对准想要拍摄的主题。
 - 将**镜头开/关**转换切换到打开状态(O)。 ➞第8页
3. 半按**PHOTO**按钮。(按下一半)
 - 高清数码摄像机自动在显示屏的中心位置聚焦要拍摄的主题。(当选择自动聚焦时)。
 - 聚焦图像成功时，屏幕上的指示图标 (●) 显示为绿色。
4. 完全按下**PHOTO**按钮。(完全按下)
 - 可以听到快门音。当屏幕上显示指示图标 (▶▶▶) 时，照片图像被记录。
 - 在保存照片图像期间，您不能够进行下一次的拍摄。



- 根据图像的质量或图像大小确定可存储的照片图像数量。详情请参见第28页。
- 依照正确的图示，仅可在4:3高宽比下拍摄照片图像。
- 存储介质上，照片文件不会记录下声音。
- 如果聚焦困难，请使用手动聚焦。
➞第56页
- 在访问存储介质的过程中，请不要操作**POWER**电源开关或移除存储卡。以免造成存储卡本身或保存在卡上的数据损坏。
- 高清数码摄像机拍摄的照片图像文件符合 JEITA (日本电子与信息产业协会) 创立的“DCF (相机文件系统设计理念)”通用标准。
- DCF是数码相机的联合图像文件格式：图像文件可以使用在所有符合DCF通用标准的数码设备上。

recording

RECORDING WITH EASE FOR BEGINNERS (EASY Q MODE)

- The EASY Q function is only available with the Movie and Photo modes. ➔ page 17
 - With the EASY Q function, most of the HD camcorder settings are automatically adjusted, which relieves you of detailed adjustments.
- Press the **EASY Q** button.
 - When you press the **EASY Q** button, most functions become off and the following functions are set to "Auto." (scene mode(AE), White Balance, Exposure, Anti-Shake, Focus, Shutter).
 - The EASY Q "Q" [**EASY Q**] "Q" and Anti-shake (⦿) indicators appear on the screen at the same time.
 - To record movie images, press the **Recording start/stop** button. To take photo images, press the **PHOTO** button.

To cancel the EASY Q mode

Press the **EASY Q** button again.

- The EASY Q "Q" [**EASY Q**] "Q" and Anti-shake (⦿) indicators disappear from the screen.
- Almost all the settings will return to the settings that were set prior to activating EASY Q mode.



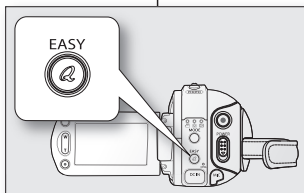
Buttons unavailable during EASY Q operation

The following buttons and control are unavailable because the items are automatically set. The "Release the Easy.Q" messages may appear if unavailable operations are attempted.

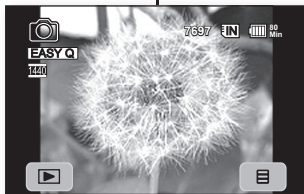
- MENU (■) tab / Q.MENU button / etc.
- See page 108 for the list of unavailable functions.
- Cancel EASY Q function if you want to add any effect or settings to the images.
- Anti-shake is available only in the movie record mode.

录制

方便初学者录制(EASY Q模式)



<Movie record mode>



<Photo record mode>

- EASY Q功能仅可在影音模式和照片模式使用。
➔第17页
- 使用EASY Q功能，高清数码摄像机的大多数拍摄设定都自动被调节，这将让您免去繁琐的调节步骤。

- 按下**EASY Q**按钮。
 - 当您按**EASY Q**按钮，多数功能将被关闭并且列出的功能将被设置为 "Auto." (自动)。(场景模式 (AE), 白平衡, 曝光, 防震动, 聚焦, 快门)。
 - 同时，屏幕上显示 EASY Q "Q" [**EASY Q**] "Q" 和防震动 (⦿) 指示图标。
- 录制影音图像，按下**录制开始/停止**按钮。拍摄照片图像，按下**PHOTO**按钮。

取消EASY Q模式

再次按下**EASY Q**按钮。

- 屏幕上EASY Q "Q" [**EASY Q**] "Q" 和防震动 (⦿) 指示图标消失。
- 几乎所有的设置将返回到使用EASY Q模式之前的设定。



在EASY Q模式下，不可使用的按钮。

因为一些项目被自动设置，所以下列按钮和菜单操作会不起作用。

如果尝试不可用的操作，可能会出现相应的消息 ("Release the EASY.Q")

(请退出 EASY.Q)

- MENU (■) 导航 / Q.MENU 按钮 / 等
- 参见第 108 页故障列表。
- 如果您想要为图像增加任何效果或设置，请取消EASY Q功能。
- 防震动功能只能在影音录制模式下使用。

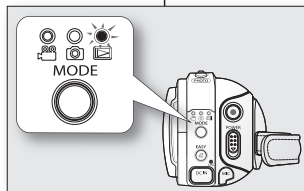
CAPTURING STILL IMAGES DURING MOVIE IMAGE PLAYBACK

- This function works only in the Play mode.
→ page 17
 - If you press the **PHOTO** button during playback, it stops playing and saves one image of the current movie scene that is paused.
 - Set the appropriate storage media.
(SC-HMX10A/HMX10C/HMX10CN/HMX10ED only) → page 26 (If you want to record on a memory card, insert the memory card.)
- Touch the Movie (🎬) tab.
 - To change the current thumbnail page, touch the up (⬆) or down (⬇) tab.
 - Touch the movie image you want.
 - Press the **PHOTO** button halfway down.
 - The Playback screen is paused.
 - Press the **PHOTO** button fully down.
 - The playback screen is paused and the still image is recorded on the storage media.



- The still images copied from the movie images to the storage media are saved. (HD format is saved in 1280x720, SD format is saved in 720x480)
- Photo images are compressed in JPEG (Joint Photographic Experts Group) format.

播放影音图像过程中捕捉静态图像



- 此功能仅可以在播放模式下使用。→第17页
- 如果在播放期间按下**PHOTO**按钮，图像将会暂停播放并且保存这个当前停留的影音画面。
- 设置适当的存储介质。
(仅限SC-HMX10A/HMX10C/HMX10CN/HMX10ED) →第26页
(如果您想使用存储卡记录文件,请插入存储卡。)



- 触摸影音导航 (🎬)
 - 触摸上 (⬆) 或下 (⬇) 导航，切换当前的索引图页面。
- 触摸您想要播放的影音图像。
- 半按下**PHOTO**按钮。
 - 将暂停播放屏幕。
- 完全按下**PHOTO**按钮。
 - 暂停播放并且将静态图像记录在存储介质。



- 从影音图像上复制的静态图像被保存在存储介质。
(HD格式以1280x720保存, SD格式以720x480保存)
- 照片图像是JPEG (Joint Photographic Experts Group)压缩格式。



recording

USING THE EXTERNAL MICROPHONE

Connect external microphone (optional-user provided) to the external microphone jack of this HD camcorder. Clearer sound can be recorded. Turn on the switch on microphone and start recording. Clearer sound can be recorded.



- This HD camcorder cannot use a plug-in power type microphone (power supplied from camcorder).
- The external 3.5 Ø microphone jack can only be connected to the HD camcorder.
- "Wind Cut" function is not available when using the external microphone.

ZOOMING

This HD camcorder allows you to record using optical 10x power zoom and digital zoom with the **Zoom** lever or the **Zoom** button on the LCD panel.

To zoom in

Slide the **Zoom** lever towards **T** (telephoto).
(Or press the **T** (zoom) button on the LCD panel.)

To zoom out

Slide the **Zoom** lever towards **W** (wide-angle).
(Or press the **W** (zoom) button on the LCD panel.)

- The farther you slide the **Zoom** lever, the quicker the zoom action.
- Zoom magnification over 10x is done through digital image processing, and is, therefore, called digital zoom. You can achieve up to 20x magnification by using digital zooming. Set "**Digital Zoom**" to "**On**." → page 62



- Focussing may become unstable during zooming. In the case, set the zoom before recording and lock the focus by using the manual focus. → page 56
- During digital zoom, the image quality may suffer.
- Macro shooting is possible as close as approx. 3 cm (1.2") to the subject when the **Zoom** lever is set all the way to **W**.
- When you zoom into a subject close to the lens, the HD camcorder may automatically zoom out depending on the distance to the subject. In this case, set "**Tele Macro**" to "**On**." → page 59

录制

使用外置麦克风

连接外置麦克风(假如用户选择)至本高清数码摄像机的外置麦克风接口。可以录制清晰的声音。打开麦克风后开始录制。可以录制清晰的声音。



- 本高清数码摄像机不能使用外接电源类型的麦克风。(摄像机提供电源)
- 仅3.5 Ø的麦克风接口能够与本高清数码相机连接。
- 当使用外置麦克风的时候, "Wind Cut" (风声消除)功能不起作用。

变焦

您可以通过**变焦控制杆**或是**LCD控制板上的变焦按钮**选择10x光学变焦和数字变焦进行录制。

拉近

将**变焦控制杆**滑向**T端**(远距)。
(或者按动LCD控制板上的**T**(变焦)按钮)

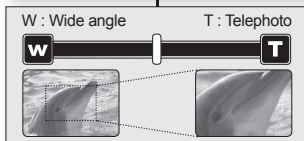
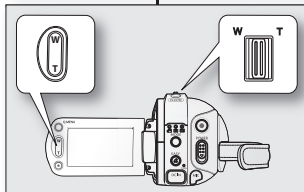
拉远

将**变焦控制杆**滑向**W端**(广角)。
(或者按动LCD控制板上的**W**(变焦)按钮)

- 使用**变焦控制杆**, 更快地进行**变焦控制**。
- 数字变焦是通过数字图像处理来完成超过10x变焦放大率的。使用数字变焦最多可放大20倍。设置 "**Digital Zoom**" (数字变焦) 为 "**On**" (打开)。→第62页



- 在变焦的过程中聚焦也许不会稳定。在这种情况下, 建议您在录制和锁定聚焦之前进行手动聚焦。→第56页
- 如果使用数字变焦则会到影音文件的质量造成一定的影响。
- 当**变焦控制杆**始终设置在**W端**, 近拍对焦到被摄主题的距离可能会缩小至大约3 cm (1.2")。
- 当您镜头迅速推进被摄主题时, 本高清数码相机也许自动拉远与被摄主题的距离。在这种情况下, 设置 "**Tele Macro**" (远程微距) 为 "**On**" (打开)。→第59页



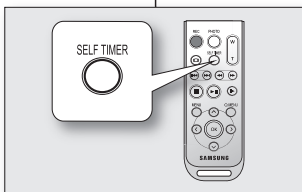
SELF RECORD USING THE REMOTE CONTROL

- The SELF TIMER function works only in Movie and Photo modes. ➡ page 17
 - When you use the SELF TIMER function on the remote control, recording begins automatically in 10 seconds.
- Press the **SELF TIMER** button.
 - The (10) indicator is displayed.
 - To record movie images, press the **REC** button. To take photo images, press the **PHOTO** button.
 - Self timer starts counting down from 10. At this moment, recording indicator blinks with beep sound.
 - At the last second of the countdown, recording starts automatically.
 - If you want to cancel the self timer function before recording, press the **SELF TIMER**, **REC** or **PHOTO** button again.

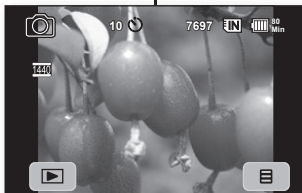


- Do not obstruct the remote control sensor by putting obstacles between the remote control and HD camcorder.
- The remote control range is 4 to 5 m (13 to 17 ft).
- The effective remote control angle is up to 30 degrees left/right from the center line.
- Using a tripod (not supplied) is recommended during self record.

使用遥控器进行自拍



<Movie record mode>



<Photo record mode>

- 自拍延时功能仅可在影音和照片模式下使用。
➡第17页
 - 当您使用遥控器上的自拍延时功能，录制将自动从10秒钟后开始。
- 按下**SELF TIMER**按键。
 - 屏幕上显示(10)指示图标。
 - 按下**REC**按键，录制影音图像。
按下**PHOTO**按键，拍摄照片图像。
 - 自拍延时从10开始倒数。此时，录制指示图标闪烁并且伴有蜂鸣音。
 - 倒数一秒后，录制自动开始。
 - 如果要在开始录制之前停止自拍定时功能，再次按下**SELF TIMER**、**REC**或**PHOTO**按钮。
- 在遥控器和高清数码摄像机之前不要有任何障碍物阻挡遥控传感器。
 - 遥控器的使用范围是4到5 m (13到17ft)。
 - 遥控器的有效遥控角度是从中心线向左/右30度。
 - 推荐您在自拍的时候使用三脚架（未提供）。



playback

You can view recorded movie and photo images in the thumbnail index view and play them in various ways.

CHANGING THE PLAYBACK MODE

- You can set the movie recording, the photo recording and the play mode in turn with **MODE** button.
- You can switch the play mode to the recording mode in turn by touching the tab on the lower left of the LCD screen.
- The recorded movie and photo images are displayed in the thumbnail index view.

播放

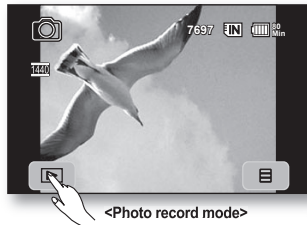
您可以通过索引画面查看录制的影音以及照片图像，并且通过各种方式播放它们。

切换到播放模式

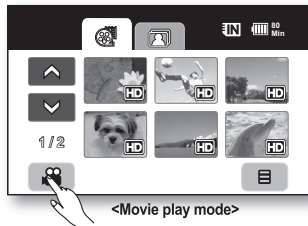
- 您可以通过**MODE**模式按钮设置为影音录制模式，拍照模式以及播放模式。
- 触摸LCD屏幕左下角中的导航键可从播放模式切换回录制模式。
- 录制的影音和照片图像以索引图的形式显示。



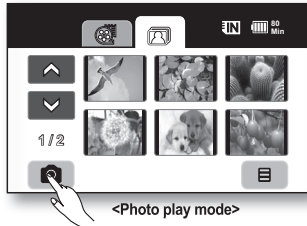
<Movie record mode>



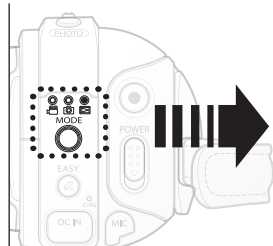
<Photo record mode>



<Movie play mode>



<Photo play mode>



PLAYING MOVIE IMAGES

- This function works only in the Play mode. ➔ page 17
 - You can find a desired movie image quickly using thumbnail index views.
 - You can also use the playback-related buttons on the remote control. ➔ page 40
- Slide the **POWER** switch downwards to turn on the power and press the **MODE** button to set Play ().
 - Set the appropriate storage media. (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only) ➔ page 26 (If you want to play from a memory card, insert the memory card.)
 - Touch the Movie () tab.
 - The thumbnail index view appears.
 - To change the current thumbnail page, touch the up () or down () tab.
 - Touch a desired movie image.
 - The selected movie image is played according to Play Option setting. ➔ page 64
 - Drag your finger from left to right to select the previous image on the LCD screen, reverse to select the next image.
 - To stop playback and return to thumbnail index view, touch the Return () tab.



- The play related tabs disappear on the screen a few seconds after the image play back. They reappear when you touch any point on the screen.
- Depending on the amount of data to be played back, it may take some time for the playback images to appear.
- Movies edited on a PC cannot be displayed on this HD camcorder.
- Movies recorded on another camcorder may not be played on this HD camcorder.
- The play is paused when you touch the menu () tab during playing.

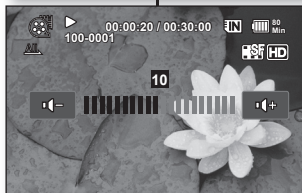
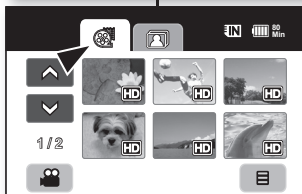
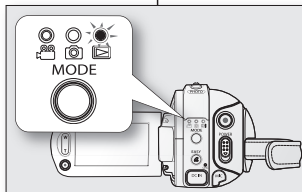
Adjusting the volume

- Touch the Volume () tab on the LCD screen.
 - You can control the volume by using decrease () or increase () tab on the LCD screen.
 - The level can be adjusted anywhere between 00 and 19.
 - You can perform the same operation by using the remote control. ()



- You can hear the recorded sound from the built-in speaker.
- If you close the LCD screen while playing, you will not hear the sound from the speaker.

播放影音图像



- 本功能仅可在播放模式下使用。➔第17页
- 您可以通过索引画面迅速地找到想要观看的影音文件。
- 您还可以使用遥控器上的与播放有关的按键。➔第40页

- 向下滑动**POWER**电源开关，打开电源并且按**MODE**模式按钮设置到播放模式()。
 - 选择适当的存储介质(仅限SC-HMX10A/HMX10C/HMX10CN/HMX10ED) ➔第26页(如果您想使用存储卡记录文件，请插入存储卡。)
- 触摸影音导航()。
 - 屏幕上显示索引画面。
 - 触摸上()或下()导航，切换当前的索引图页面。
- 触摸选择想要观看的影音文件。
 - 根据播放选项设置播放所选的影音图像。➔第64页
 - 用手指在LCD屏幕上从左向右拖动选择上一个图像，反之则选择下一个图像。
 - 想要停止播放并且返回索引画面，触摸返回导航()。



- 播放开始几秒钟之后，屏幕上与播放有关的导航键会消失。当您触摸屏幕上任一点时，导航键会再次显示。
- 根据播放文件的总数，也许需要一段反应时间屏幕上才会开始播放。
- 在电脑上编辑的影音文件在本高清数码相机上也许不会正常显示。
- 在本高清数码相机上不能播放使用其它摄像机录制的影音文件。
- 在播放的过程中，当您触摸菜单导航()的时候，暂停播放。

调节音量

- 触摸LCD显示屏上的音量导航()。
 - 您可以使用LCD显示屏上的减小音量()或增大音量()导航键。
 - 可以在00至19的范围内任意调节。
 - 您可以使用遥控器进行相同的操作()。
- 您能够通过内置扬声器听到录制的声音。
- 如果在播放的过程中关闭LCD显示屏，您将不会从扬声器听到任何声音。



playback

Various playback operations

Playback / Pause / Stop

- Play and Pause functions alternate when you touch the Playback (▶) / Pause (⏸) tab during playback. Touch the Return (⏮) tab to stop playback.
- You can perform the same operation by using the remote control. (⏮/⏭)
- You can change playback direction by using Forward (⏭) and Reverse (⏮) on the remote control during playback.

Search playback

- During playback, each touch of Reverse search (⏮) / Forward search (⏭) tab increases the play speed.
 - RPS (Reverse Playback Search) rate:
x2 → x4 → x8 → x16 → x32 → x2
 - FPS (Forward Playback Search) rate:
x2 → x4 → x8 → x16 → x32 → x2
- You can perform the same operation by using the remote control. (⏮/⏭)
- To resume normal playback, touch the Playback (▶) tab or press Playback/Pause button (⏮/⏭) on the remote control.

Skip playback

- Touch the Reverse skip (⏮) / Forward skip (⏭) tab during playback. When playing the selected movie, if you touch the Forward skip (⏭) tab, it moves to the next movie. If you touch the Reverse skip (⏮) tab, it moves to the beginning of the movie. If you touch the Reverse skip (⏮) tab, within 3 seconds from the start of a movie, it moves to the beginning of the previous movie.
- You can perform the same operation by using the remote control. (⏮/⏭)

Slow playback

- Touching the Reverse slow (⏮) / Forward slow (⏭) tab while paused will play the movie forward or reverse at the 1/2x and 1/4x speed.
- You can play the movie at the 1/2x and 1/4x speed by using the Slow (⏮) button and change playback direction by using Forward (⏭) and Reverse (⏮) button on the remote control.
- To resume normal playback, touch Playback (▶) tab or press the Playback/Pause (⏮/⏭) button on the remote control.

Frame by frame playback

- During pause, press the Forward (⏭) button on the remote control to begin the forward frame advance.
- To resume normal playback, press the Playback/Pause (⏮/⏭) button. (Or touch the Playback (▶) tab on the screen.)

播放

各种播放操作

播放/暂停/停止

- 在播放的过程中，当您触摸播放 (▶) / 暂停 (⏸) 导航时会在播放和暂停功能之间转换。触摸返回导航键 (⏮) 停止播放。
- 您还可以使用遥控器进行相同的操作。 (⏮/⏭)
- 在播放期间，可以使用遥控器上的向前 (⏭) 和向后 (⏮) 更改播放方向。

搜索播放

- 在播放过程中，每次触摸向后搜索 (⏮) / 向前搜索 (⏭) 导航加快播放速度。
 - RPS (后退播放搜索) 速率: x2 → x4 → x8 → x16 → x32 → x2
 - FPS (前进播放搜索) 速率: x2 → x4 → x8 → x16 → x32 → x2
- 您可以使用遥控器进行相同的操作。 (⏮/⏭)
- 要继续正常播放，触摸播放 (▶) 导航键或按下遥控器上的播放/暂停按钮 (⏮/⏭)。

跳过播放

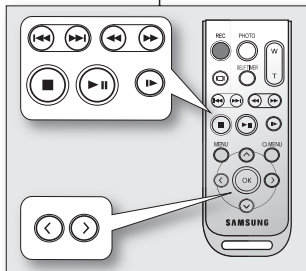
- 在播放过程中，触摸向后跳过 (⏮) / 向前跳过 (⏭) 导航。
 - 当正在播放一个存储介质的文件，如果您触摸向后跳过 (⏮) 导航，将会跳到下一个影音文件。如果您触摸向后跳过 (⏮)，将从此文件的起点开始。如果您触摸向前跳过 (⏭)，三秒钟之内从某一点跳到上一个影音文件的起点。
- 您还可以使用遥控器进行相同的操作。 (⏮/⏭)

慢放

- 暂停播放，触摸向后慢放 (⏮) / 向前慢放 (⏭) 导航将会以 1/2x 和 1/4x 的速度向前或向后播放。
- 可以使用慢速 (⏮) 按钮来以 1/2 或 1/4 倍速度播放视频，并可使用遥控器上的向前 (⏭) 和向后 (⏮) 按钮更改播放方向。
- 要继续正常播放，触摸播放 (▶) 导航键或按下遥控器上的播放/暂停按钮 (⏮/⏭)。

逐帧播放

- 在暂停播放期间，按动遥控器上的控制按键 (⏭) 开始向前逐帧播放。
- 恢复一般播放模式，按下播放/暂停按钮 (⏮/⏭)。(或者触摸显示屏上的播放 (▶) 导航。)



VIEWING PHOTO IMAGES

- This function works only in the Play mode. → page 17
 - You can play back and view photo images recorded on the storage media.
1. Slide the **POWER** switch downwards to turn on the power and press the **MODE** button to set Play ().
 - Set the appropriate storage media. (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only) → page 26 (If you want to playback images in a memory card, insert the memory card.)
 2. Touch the Photo () tab.
 - The thumbnail index view appears.
 - To change the current thumbnail page, touch the up () or down () tab.
 3. Touch a desired photo image.
 4. Touch previous image ()/next image () tab, search for the desired photo image.
 - To view the previous image, touch the previous image () tab.
 - To view the next image, touch the next image () tab.
 - Drag your finger from left to right to select the previous image on the LCD screen, reverse to select the next image.
 - Place and hold your finger at previous image () / next image () tab to search for an image quickly. Actually the image number is changed during search with images not changed.
 5. To return to the thumbnail index view, touch the Return () tab.
 - The play-related tabs disappear from the screen a few seconds after play starts. They reappear when you touch any point on the screen.
 - Loading time may vary depending on the image size.
 - Photo(JPEG) files created in the other devices cannot be played back in this HD camcorder.

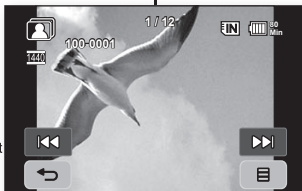
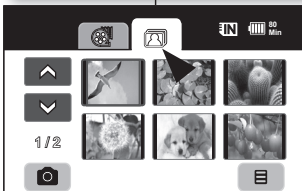
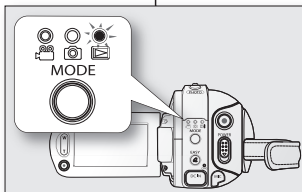
To view a slide show

Set the slide show function for continuous display.

1. Touch the Menu () tab in the thumbnail index view or single-image display mode.
 - The menu will appear.
2. Touch "Slide Show."
 - The () indicator is displayed. The slide show will start from the current image.
 - All images will be played back consecutively for 2~3 seconds each.
 - To stop the slide show, touch the Return () tab.

Slide show is available also in the quick menu. → page 51

查看照片图像



<Slide show>

- 本功能仅适用于播放模式。→第17页
- 您可以播放和查看记录在存储介质上的照片图像。

1. 向下滑动**POWER**电源开关打开电源并且按动**MODE**模式按钮设置到播放模式()。
 - 设置适当的存储介质。(仅限SC-HMX10A/HMX10C/HMX10CN/HMX10ED)→第26页(如果您想使用存储卡记录文件,请插入存储卡。)
2. 触摸照片导航()。
 - 屏幕上显示索引画面。
 - 触摸上()或下()导航,切换当前的索引画面。
3. 触摸想要查看的照片图像。
4. 触摸上一个图像()/下一个图像()导航,搜索想要查看的照片图像。
 - 触摸上一个图像()导航,查看上一个图像。
 - 触摸下一个图像()导航,查看下一个图像。
 - 用手指在LCD屏幕上从左右拖动选择一个图像,反之则选择下一个图像。
 - 用手指按住上一个图像()/下一个图像()导航,更快地搜索想要查看的图像。实际上,在搜索期间,文件编号更改,而图像不变。
5. 想要返回到索引画面,触摸返回导航()。



- 播放开始几秒钟之后屏幕上与播放有关的导航键便会消失。当您再次触摸屏幕上的任意点时,这些导航键便会再次显示。
- 根据图像的大小确定需要加载的时间。
- 使用其他设备拍摄的照片(JPEG)文件不能通过本高清数码摄像机进行查看。

幻灯放映

设置幻灯放映功能进行连续显示。

1. 在索引画面显示或单画面显示模式下,触摸菜单()导航。
 - 屏幕上显示菜单。
2. 触摸"Slide Show"(幻灯放映)
 - 屏幕上显示指示图标()。从当前的图像开始幻灯放映。
 - 间隔2~3秒钟连续播放所有图像。
 - 想要停止幻灯放映,触摸返回导航()。

也可以通过快捷菜单使用幻灯放映功能。→第51页



playback

Zooming during playback

You can magnify the playback image from about 1.1 to 8 times the original size.

Magnification can be adjusted with the **Zoom** lever or the **Zoom** button on LCD panel.

1. Touch the image you want to magnify.
2. Adjust the magnification with **W** (Wide angle)/**T** (Telephoto).
 - The screen is framed and the image is magnified starting from the center of image.
 - You can zoom in from X1.1 to X8.0 by sliding the **Zoom** lever.
 - While the playback zoom is acting, you cannot select any previous/next image.
3. Touch the up (▲)/down (▼)/left (◀)/right (▶) tab to get the part you want in the center of the screen.
4. To cancel, touch the Return (↶) tab.



- You cannot apply the playback zoom function to the images that are recorded on other devices.
- Playback zoom function is available only in the photo play mode.

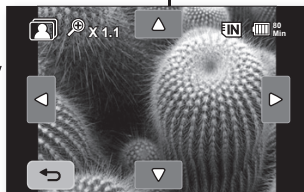
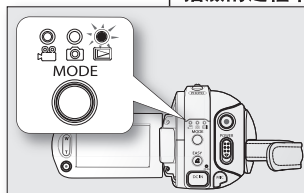
播放

播放的过程中进行变焦

您可以放大图像至原始尺寸的1.1到8倍。

可以通过调节**变焦**控制杆或者LCD控制板上的**变焦**按钮进行放大。

1. 选择触摸您想要放大的图像。
2. 使用**W** (广角)/**T** (远距)调节放大。
 - 从图像的中心开始放大。
 - 您可以拨动**变焦**控制杆在X1.1到X8.0范围内进行变焦。
 - 在开始播放变焦的过程中，您不能进行选择上一个/下一个图像。
3. 触摸屏幕的上(▲)/下(▼)/左(◀)/右(▶)导航，选择想要显示的框架中心点。
4. 想要退出，触摸返回导航(↶)。



- 使用其它设备拍摄的图像不能进行播放变焦操作。
- 播放变焦功能只能在照片查看模式下使用。

connection

You can view the recorded movie and photo images on a large screen by connecting the HD camcorder to an HDTV or normal TV.

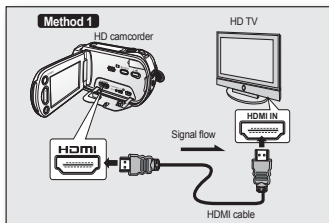
CONNECTING TO A TV

Before connecting to TV

- According to TV and cables that are used, the connection method and resolution can differ.
- For more information about the connection, refer to the TV user manual.
- Use the supplied AC power adaptor as the power source. ~page 16

Connecting to a high definition TV

- To play back the HD-quality (1280x720) movie images, you need a high definition TV (HDTV).
- Method 1: Connect your HD camcorder to a TV with an HDMI cable. (HDMI cable is not supplied.)
- Method 2: Tune the output signal for TV using the "Component Out" function. ~page 71



- **About the HDMI (High Definition Multimedia Interface)**
HDMI jack is an interface to both video/audio signals. HDMI connection supplies high quality images and sounds.
- The HDMI jack on your HD camcorder is for output use only.
- You can use Anynet+ function by connecting the HD camcorder to Anynet+ supported TV with the HDMI cable. Refer to the corresponding TV user manual for more details.
- When the HD camcorder connected to the Anynet+ supported TV with an HDMI cable turns on, TV automatically turns on. (It is one of the Anynet+ functions.) If you do not want to use Anynet+ function, set "Anynet+ (HDMI-CEC)" to "Off." ~page 70
- The Camcorder's output is fixed to 480p when a DVI cable is connected. To hear audio, the audio cable of Component or Multi-AV cable must be connected.
- When an HDMI cable is connected, it will override all other connections.
- HDMI feature can recognize the TV type automatically and adjust the video output resolution. Manual setting is not necessary.

连接

您可以将高清数码摄像机连接至高清电视或普通电视观看录制的影音以及查看照片图像。

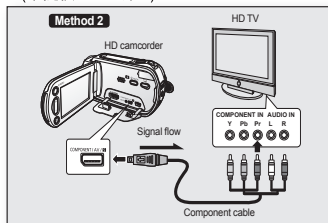
与电视机连接

与电视机连接之前

- 根据电视机以及电缆的使用情况，连接方法和清晰度会有所不同。
- 关于连接的相关信息，请参考电视机用户说明书。
- 使用提供的交流电源适配器连接电源。~第16页

与高清电视机连接

- 预播放高清质量(1280x720)的影音图像，您需要一台高清电视机。(HDTV)
- 方法1: 用HDMI线将高清数码摄像机连接到电视。(未提供HDMI线。)

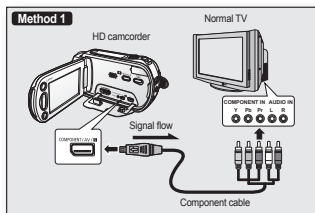


- **关于HDMI(高清晰度多媒体接口)**
HDMI是集合视频/音频信号的接口。HDMI连接为您提供高品质图像和声音。
- 高清数码摄像机上的HDMI接口仅为输出信号使用。
- 您可以通过HDMI电缆将高清数码摄像机连接至提供Anynet+的电视机，使用Anynet+功能。详情参考相应的电视机使用说明书。
- 当在将HDMI电缆连接至提供Anynet+功能的电视机期间开启数码摄像机时，电视机自动打开(这是Anynet+的功能之一)。如果不想使用Anynet+功能，则将"Anynet+ (HDMI-CEC)"设置为"Off"(关闭)。~第70页
- 如果连接了DVI线，则摄像机的输出将固定为480p。要聆听音频，必须连接分量电缆或Multi-AV电缆线。
- 如果连接了HDMI线，则它会替换所有其他连接。
- HDMI功能可自动识别电视类型并调整视频输出分辨率。不需要进行手动设置。

connection

Connecting to a normal TV (16:9/4:3)

- Even if the movie image is recorded in HD quality, it is played back in SD quality on the normal TV not HDTV.
- When playing back the HD-quality (1280x720) movie images on an SDTV, the images are down-converted to a low quality of 720x480.
- The multi-AV cable does not support HD-quality images so it down-converts them to SD-quality images.
- Before connecting your HD camcorder to a TV, set the same aspect ratio on your HD camcorder as on your TV. ➔page 70
- Method 1: Tune the output signal for TV using the **"Component Out"** function. ➔page 71
- Method 2: When connecting with Multi-AV cable.

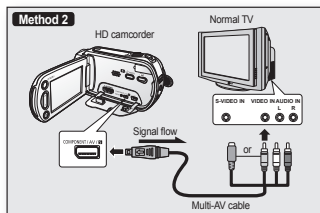


- If only a mono audio input is available on the TV set, use the audio cable with the white jack (Audio L).
- You may use an S-Video jack on the cable to obtain better quality images if you have an S-Video jack on your TV.
- Even if you use an S-Video jack, you need to connect an audio cable.
- When connecting HDMI, component and multi-AV cables at the same time, the video output priorities are as follows: HDMI output → Component output → S-Video output → Video output
- When connecting your HD camcorder to TV through HDMI, component, or multi-AV cable, check whether the connections are correctly made.
- When inserting/removing the HDMI, component, and multi-AV cables, do not apply excessive force.
- When handling the multi-AV cable and component cable, connect it to have the same colors connected between the cable connectors and TV jacks.
- It is recommended to use the AC power adaptor as the power source.
- When the HD camcorder is connected to a TV, you cannot control the volume of the TV from the camcorder.

连接

与普通电视机连接 (16:9/4:3)

- 即使视频图像是以HD质量录制的，在连接了普通电视时也只能以SD质量播放。
- 当在SD电视机上播放HD质量 (1280x720) 的影音图像时，画面会降低质量为720x480。
- multi-AV电缆不支持HD画质，因此使用它将会将画质降低为SD画质的图像。



- 方法2: 通过Multi-AV电缆连接。



- 如果电视机上仅有一个单音频输入，请使用音频电缆与白色接口连接(AUDIO L)。
- 如果您的电视机拥有S-Video接口，您可以将电缆与S-Video接口相连以获得更好的图像质量。
- 即使您使用S-Video接口，也仍然需要连接音频电缆。
- 当与HDMI，分量，multi-AV电缆一起连接，视频输出的顺序是：HDMI输出→分量输出→S-Video输出→视频输出。
- 当您的高清数码相机通过HDMI，分量，或multi-AV电缆与电视机连接时，请检查连接的方式是否正确。
- 当插入/移除HDMI，分量和multi-AV电缆时，不要用力过大。
- 当使用multi-AV电缆和分量电缆时，用同样颜色的数据线连接电视机上同样颜色的接口。
- 建议您使用交流电源适配器提供电能。
- 当高清数码相机与电视机相连，不能使用摄像机控制音量。您可以通过电视机控制音量

Viewing on TV screen

- Slide the **POWER** switch downwards to turn on the power and press the **MODE** button to set Play (). ➔ page 17
- Turn on the TV and set the input source to the input connection the HD camcorder is connected to.
 - Refer to TV instruction manual for how to switch the TV input.
- Perform playback. ➔ page 39, 41
 - The image on HD camcorder appears on the TV screen.
 - You can also monitor the image on the LCD screen of the HD camcorder.
 - You can also perform play, recording or editing in play mode while viewing on TV screen.

Image display depending on TV screen ratio

Recording ratio	TV Type setting	Wide (16:9) TV	4:3 TV
Images recorded in the 16:9 ratio - Movie images - Photo capture images	16:9		
	4:3		
Photo images recorded in the 4:3 ratio	16:9		
	4:3		

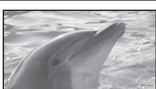
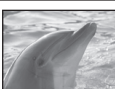
- Refer to page 70 for “**TV Type**” setting.

Continued ➔

在电视上查看

- 向下滑动**POWER**电源开关开启摄像机电源并且按**MODE**模式按钮设置到播放模式()。➔第17页
- 打开电视机，然后将输入选择器设置为连接数码摄像机的输入连接处。
 - 请参阅电视机说明书以了解如何切换电视输入。
- 执行播放。 ➔第39,41页
 - 电视屏幕上显示高清数码摄像机上的图像。
 - 您还可以通过高清数码摄像机的LCD显示屏同步观看图像。
 - 在连接了电视机时，您也可以进行播放，录制或在播放模式下进行编辑。

根据不同的电视机屏幕高宽比的图像显示

录制的高宽比	电视机类型设置	宽屏幕(16:9)电视	4:3电视
以16:9高宽比录制图像 - 影音图像 - 照片捕捉图像	16:9		
	4:3		
以4:3高宽比拍摄照片图像	16:9		
	4:3		

- 参照第70页进行“**TV Type**”(TV 类型)设置。

继续 ➔

connection



- Adjust the sound volume on TV.
- The remote control is useful when operating the HD camcorder while viewing an image on TV screen.
- Information that the HD camcorder is recording will appear on the TV screen: You can switch between the on-screen information display modes. Refer to "Switching the information display mode" and press the **Display** (I/O)/**CHECK** button to switch the display status. →page 22

DUBBING IMAGES ONTO VCR OR DVD/HDD RECORDER

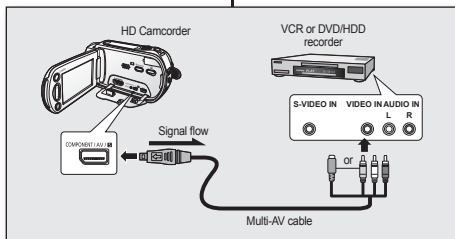
- You can dub images played back on this HD camcorder, onto VCR or DVD/HDD recorder.
 - Refer to "Editing chapter" to create a playlist by selecting desired scenes from those recorded on this HD camcorder. →page 75
 - Use the provided cable to connect the HD camcorder to the other AV device.**
 - If you are using the connected AV device that has an S-Video output jack, you can connect the S-Video jack of the Multi-AV Cable.
- Press the **MODE** button to set Play (I/O).
 - Choose the desired image to be dubbed, then press the record button on the connected device.
 - The HD camcorder will start playback and the recording device will dub it.
- Using S-Video will deliver clear images.
 - Be sure to use the AC power adaptor to power the HD camcorder to prevent battery power from shutting off during recording on another video device.

连接



- 请调节电视机的音量。
- 当正在通过电视屏幕进行观看的过程中操作高清数码摄像机时，遥控器可以使用。
- 高清数码摄像机录制的信息将出现在电视机屏幕上：您也可以仅显示部分信息或关闭显示。请参阅“切换信息显示模式”并按下**显示 (I/O)/CHECK** 按钮以切换显示状态。→第22页

通过VCR或DVD/HDD刻录机复制图像



- 您可以将在本高清数码摄像机上播放的图像通过VCR或DVD/HDD刻录机进行图像复制。
- 请参考“编辑章节”，由本摄像机录制的影音图像中选择想要的场景，进行创建播放列表。→第75页
- 使用提供的电缆将高清数码摄像机连接至其它AV设备。**
- 如果被连接的AV设备有S-Video端子，您可以使用Multi-AV电缆与该S-Video端子连接。

- 按动**MODE**模式按钮设置到播放模式(I/O)。
- 选择想要复制的图像，然后按下连接设备上的录制按钮。
 - 高清数码摄像机将开始播放并且刻录设备启动复制。



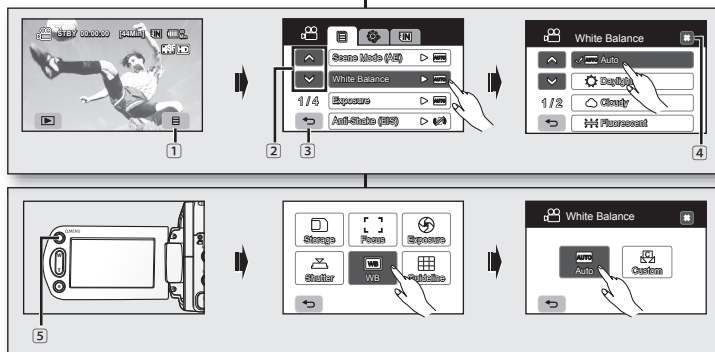
- 使用S-Video将传递更清晰的图像。
- 请务必使用交流电源适配器从家用交流电源插座为数码摄像机提供电源，以防在其他视频设备上录制时出现因电池电量低导致断电现象。

using the menu items

You can use the HD camcorder more usefully by setting menus related to recording, playback and setting.

HANDLING MENUS AND QUICK MENUS

- You can change the menu settings to customise your HD camcorder. Access the desired menu screen by following the steps below and change the various settings.
- Using the touch panel, you can easily make your selection and navigate the menu.



- Menu () tab: Use it to enter the menu.
- Up ()/down () tab: Use it to change the previous or next page.
- Return () tab: Use it to move to the previous menu or exit from the menu.
- Exit () tab: Use it to exit from the menu.
- Q.MENU** button: Use it to enter the quick menu. Quick menu provides easier access to frequently used menus without using the Menu () tab.



- Menu and quick menu cannot be used in EASY Q mode.
- Accessible items in menu and quick menu vary depending on the operation mode. For the accessible items, see pages 49-51.

使用菜单选项

您可以通过设置菜单使用更多有关录制，播放和设置的功能。

操作菜单和快捷菜单

- 您可以更改菜单，个性化设置您的高清数码摄像机。按照如下步骤访问菜单屏幕以及更改各种设置。
- 使用触控控制板，使您更加方便地使用菜单进行选择。

- 菜单导航 ()：通过菜单导航进入菜单。
- 上 ()/下 () 导航：通过上下导航更换上一页或下一页。
- 返回导航 ()：通过返回导航移动到上一级菜单或者退出菜单。
- 退出 () 导航：通过退出导航离开菜单。
- Q.MENU** 按钮：通过 Q.MENU 按钮进入快捷菜单。可以不使用菜单导航 ()，利用快捷菜单更加方便地进入一些经常使用的功能菜单。



- 在EASY Q模式下菜单和快捷菜单不能使用。
- 根据操作模式的变化，菜单选项和快捷菜单选项也会有相应的变化。详细的内容，请见第49-51页。

using the menu items

- Follow the instruction below to use each of the menu items listed on this page.

For example: setting the White Balance in movie mode

When using Menu () tab;

- Touch the Menu () tab.
- Touch "White Balance."
- If the item is not on the screen, touch the up () or down () tab to scroll up or down to the next group of options.
- Touch the desired option.
- If the item is not on the screen, touch the up () or down () tab to scroll up or down to the next group of options.
- To exit, touch the Exit () tab or Return () tab until the menu disappears.

When using the Q.MENU button;

- Press the Q.MENU button to enter the quick menu.
- Touch "WB."
- Touch the desired option.
- To exit, touch the Exit () tab or Return () tab until the menu disappears.

 There are some functions you cannot activate simultaneously, when using Menu () tab or Q.MENU button. You cannot select the grey menu items on the screen. Refer to the troubleshooting for examples of unworkable combinations of functions and menu items.
→page 108

使用菜单选项

- 以下内容为您介绍使用每个菜单项。

例如：在影音录制模式下设置白平衡。

当使用菜单导航()；

- 触摸菜单导航()。
- 触摸“White Balance”(白平衡)。
- 如果屏幕上没有想要的选项，触摸上 () 或下 () 导航向上或向下滚动至下一组选项。
- 触摸想要的选项。
- 如果屏幕上没有想要的选项，触摸上 () 或下 () 导航向上或向下滚动至下一组选项。
- 触摸退出导航() 或返回导航() 直到屏幕上不再显示菜单，退出菜单。

当使用Q.MENU按钮；

- 按Q.MENU按钮进入快捷菜单。
- 触摸“WB”(白平衡)。
- 选择想要的选项。
- 触摸退出导航() 或返回导航() 直到屏幕上不再显示菜单，退出菜单。

 当使用菜单导航() 或Q.MENU按钮时，有一些功能不可以同时使用。不能选择的菜单选项在屏幕上显示为灰色。详情请参见故障处理。→第108页



MENU ITEMS

- Accessible items in menu vary depending on the operation mode.
- For operation details, see the corresponding page.

Recording menu items (📷)

● : Possible
X : Not possible

Operating mode	Movie (📹)	Photo (📷)	Default value	Page
Scene Mode (AE)	●	●	Auto	52
Resolution	X	●	1440x1080	63
Cont. Shot	X	●	Off	63
White Balance	●	●	Auto	53
Exposure	●	●	Auto	54
Anti-Shake (EIS)	●	X	Off	55
Digital Effect	●	X	Off	56
Focus	●	●	Auto	56
Shutter	●	X	Auto	58
Tele Macro	●	●	Off	59
Quality	●	X	(HD) Super Fine	60
Wind Cut	●	X	Off	60
Back Light	●	●	Off	61
Fader	●	X	Off	61
Digital Zoom	●	X	Off	62

Playback menu items (📺)

Operating mode		Movie (📹)	Photo (📷)	Default value	Page
Play Option		●	X	Play All	64
Slide Show		X	●	-	41
Delete		●	●	-	79
Protect		●	●	-	78
Copy*		●	●	-	80
Move*		●	●	-	81
Edit	Partial Delete	●	X	-	72
	Divide (thumbnail index view only)	●	X	-	73
	Combine (thumbnail index view only)	●	X	-	74
Cont. Capture		●	X	Off	64
Print Mark (DPOF) (Memory card only)		X	●	-	82
File Info (single display mode only)		●	●	-	65

菜单选项

- 根据操作模式的变化，菜单选项也会有相应的变化。
- 详细的操作细节，请参看对应页的内容。

录制菜单选项 (📷)

● : 可能
X : 不可能

操作模式	影音 (📹)	照片 (📷)	默认参数	页码
Scene Mode (AE) (场景模式 (AE))	●	●	Auto(自动)	52
Resolution(分辨率)	X	●	1440x1080	63
Cont. Shot(连续拍摄)	X	●	Off(关闭)	63
White Balance(白平衡)	●	●	Auto(自动)	53
Exposure(曝光)	●	●	Auto(自动)	54
Anti-Shake (EIS) (防震动 (EIS))	●	X	Off(关闭)	55
Digital Effect(数字特效)	●	X	Off(关闭)	56
Focus(聚焦)	●	●	Auto(自动)	56
Shutter(快门)	●	X	Auto(自动)	58
Tele Macro(远摄微距)	●	●	Off(关闭)	59
Quality(质量)	●	X	[HD] Super Fine [HD] 高清晰	60
Wind Cut(风声消除)	●	X	Off(关闭)	60
Back Light(背光补偿)	●	●	Off(关闭)	61
Fader(淡化器)	●	X	Off(关闭)	61
Digital Zoom(数字变焦)	●	X	Off(关闭)	62

播放菜单选项 (📺)

操作模式		影音 (📹)	照片 (📷)	默认参数	页码
Play Option(播放选项)		●	X	Play All (全部播放)	64
Slide Show(幻灯片放映)		X	●	-	41
Delete(删除)		●	●	-	79
Protect(保护)		●	●	-	78
Copy(复制)*		●	●	-	80
Move(移动)*		●	●	-	81
Edit (编辑)	Partial Delete (部分删除)	●	X	-	72
	Divide(分割) (仅限索引画面)	●	X	-	73
	Combine(合并) (仅限索引画面)	●	X	-	74
Cont. Capture(连续捕捉)		●	X	Off(关闭)	64
Print Mark(DPOF) (打印标识(DPOF)) (仅适用于存储卡)		X	●	-	82
File Info(文件信息) (仅限单画面显示模式)		●	●	-	65

using the menu items

Setting menu items (⚙️)

Operating mode	Default value	Page
Date/Time Set	-	66
Date/Time	Off	66
File No.	Series	66
LCD Control	Bright 18 / Contrast 18	67
Storage Info	-	67
Format	-	68
Beep Sound	On	68
Shutter Sound	On	68
Auto Power Off	5 min	69
LED Light	Off	69
Rec Lamp	On	69
Remote	On	70
USB Connect	Mass Storage	70
TV Type	16:9	70
Component Out	Auto	71
Default Set	-	71
Language	-	71
Demo	Off	71
Anynet+ (HDMI-CEC)	On	70

- Some items will not appear depending on the storage media type.
- There are some functions you cannot activate simultaneously, when using Menu (■) tab or **Q.MENU** button. You cannot select the menu items that are greyed out on the screen. Refer to the troubleshooting for examples of unworkable combinations of functions and menu items. ➡ page 108
- *: only for SC-HMX10A/HMX10C/HMX10CN/HMX10ED.

使用菜单选项

设置菜单选项 (⚙️)

操作模式	默认参数	页码
Date/Time Set (日期 / 时间设置)	-	66
Date/Time (日期 / 时间)	Off(关闭)	66
File No. (文件编号)	Series(连续)	66
LCD Control (LCD 控制)	亮度 18 / 对比度 18	67
Storage Info (存储信息)	-	67
Format (格式化)	-	68
Beep Sound (蜂鸣音)	On(打开)	68
Shutter Sound (快门音)	On(打开)	68
Auto Power Off (自动断电)	5 min(5 分钟)	69
LED Light (LED 灯)	Off(关闭)	69
Rec Lamp (录制指示灯)	On(打开)	69
Remote (遥控)	On(打开)	70
USB Connect (USB 连接)	Mass Storage(海量存储)	70
TV Type (TV 类型)	16:9	70
Component Out (分量输出)	Auto(自动)	71
Default Set (默认设置)	-	71
Language	-	71
Demo(演示)	Off(关闭)	71
Anynet+ (HDMI-CEC)	On(打开)	70

- 根据存储介质的类型一些选项不会显示。
- 当使用菜单导航(■)或**Q.MENU**按钮时, 有一些功能不可以同时使用。不能选择的菜单选项在屏幕上显示为灰色。详情请参见故障处理。➡第108页
- *: 仅限SC-HMX10A/HMX10C/HMX10CN/HMX10ED。

QUICK MENU ITEMS

- Accessible items in the quick menu vary depending on the operation mode.
- For operation details, see the corresponding page.

Recording menu items

● : Possible
X : Not possible

Operating mode	Movie (📹)	Photo (📷)	Default value	Page
Storage*	●	●	Memory	26
Focus	●	●	Auto	56
Exposure	●	●	Auto	54
Shutter	●	X	Auto	58
WB	●	●	Auto	53
Guideline	●	●	Off	64

Playback menu items

Operating mode	Movie (📹)	Photo (📷)	Default value	Page
Storage*	●	●	Memory	26
Copy*	●	●	-	80
Delete	●	●	-	79
Edit	●	X	-	72-74
Playlist	●	X	-	76-77
Highlight	●	X	-	65
Slide	X	●	-	41

- Some items will not appear depending on the storage media type.
- There are some functions you cannot activate simultaneously, when using Menu (⏏) tab or Q.MENU button. You cannot select the menu items that are greyed out on the screen. Refer to the troubleshooting for examples of unworkable combinations of functions and menu items. → page 108
- *: only for SC-HMX10A/HMX10C/HMX10CN/HMX10ED.

快捷菜单选项

- 根据操作模式的变化，快捷菜单选项也会有相应的变化。
- 详细的操作细节，请参看对应页的内容。

录制菜单选项

● : 可能
X : 不可能

操作模式	影音 (📹)	照片 (📷)	默认参数	页码
Storage(存储器)*	●	●	Memory (内置存储器)	26
Focus(聚焦)	●	●	Auto(自动)	56
Exposure(曝光)	●	●	Auto(自动)	54
Shutter(快门)	●	X	Auto(自动)	58
WB(白平衡)	●	●	Auto(自动)	53
Guideline(指南)	●	●	Off(关闭)	64

播放菜单选项

操作模式	影音 (📹)	照片 (📷)	默认参数	页码
Storage(存储器)*	●	●	Memory (内置存储器)	26
Copy(复制)*	●	●	-	80
Delete(删除)	●	●	-	79
Edit(编辑)	●	X	-	72-74
Playlist(播放列表)	●	X	-	76-77
Highlight(突出显示)	●	X	-	65
Slide(幻灯片)	X	●	-	41

- 根据存储介质的类型一些选项不会显示。
- 当使用菜单导航(⏏)或Q.MENU按钮时，有一些功能不可以同时使用。不能选择的菜单选项在屏幕上显示为灰色。详情请参见故障处理。→第108页
- *: 仅限SC-HMX10A/HMX10C/HMX10CN/HMX10ED。

using the menu items

RECORDING MENU ITEMS

You can set up the menu items for movie and photo images recording.

Scene Mode (AE)

This HD camcorder automatically sets the shutter speed and aperture according to the subject brightness for optimum recording. You can also specify one of five modes depending on conditions, recording environment or purpose of filming.

Settings	Contents	On-screen display
Auto	- Auto balance between the subject and the background. - To be used in normal conditions. - The shutter speed is automatically adjusted from 1/60 to 1/250 per second, depending on the scene.	None
Sports	- Reduces blurring when recording rapidly moving subjects such as in golf or tennis. If the Sports mode is used under a fluorescent light, the image may flicker. In this case, use the Auto mode for recording.	
Portrait	- Creates a shallow depth of field so that the person or subject appears against a softened background. - The portrait mode is most effective when used outdoors. - The shutter speed is automatically adjusted from 1/60 to 1/1000 per second.	
Spotlight	- Prevents overexposure of subject's face, etc., when strong light strikes the subject, as in a wedding or on stage.	
Beach/Snow	- Prevents underexposure of subject's face, etc., in a place where reflection of light is intense, such as at the beach in midsummer or on a ski slope.	



- You can check the selected Scene mode on the on-screen information display. However, nothing will appear in Auto mode.
- This function will be set to "Auto" in the EASY Q mode.

使用菜单选项

录制菜单选项

您可以为录制影音以及拍摄照片图像设置菜单选项。

场景模式 (AE)

为了达到比较好的拍摄效果，根据被拍摄主题的亮度，本高清数码摄像机自动设置快门速度和光圈：您也可以根据具体情况，录制的环境或目的选择五种模式中的一种。

设置	内容	屏幕显示
Auto(自动)	- 自动在被摄主题和背景之间平衡。 - 在一般情况下使用。 - 快门速度在每秒 1/60 到 1/250 的范围内自动变换，视场景而定。	无
Sports(运动)	- 用于录制移动着的主题，例如高尔夫球或者网球。如果在荧光灯下使用运动模式，图像可能会闪烁。在这种情况下，请使用自动模式录制。	
Portrait(肖像)	- 用于突出被摄人物或主题模糊背景。 - 适宜在户外使用。 - 快门速度被自动调节为每秒 1/60 到 1/1000。	
Spotlight(聚光)	- 补偿直接出现在强光下过亮的物体。例如婚礼或者其他场所。	
Beach/Snow(海滩/雪地)	- 用于反光很强烈的地方。例如盛夏的海边或者滑雪场。	



- 您可以通过屏幕显示查看当前的场景模式。但是，场景模式为自动设置时，屏幕上没有相应的指示图标。
- 在EASY Q模式下，此功能将被自动设置为“Auto(自动)”。

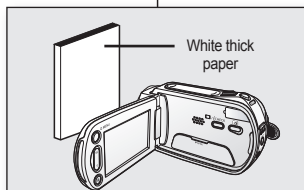
White Balance

This HD camcorder automatically adjusts the color of subject. Change the white balance setting depending on the recording conditions.

Settings	Contents	On-screen display
Auto	This option is generally used to control the white balance automatically.	None
Daylight	This controls the white balance according to the outdoor ambience, especially for close up and when the subject is of one dominant color.	
Cloudy	This option is used when you make a recording in cloudy weather.	
Fluorescent	This option is used when you make a recording under white fluorescent lights.	
Tungsten	This option is used when the surroundings are less than 3200K of tungsten lights.	
Custom WB	You can manually adjust white balance to match the light source or situation	

Setting white balance manually;

- Touch "Custom WB."
- The "Set White Balance" indicator is displayed.
- Frame a white object such as a piece of white paper so that it fills the screen.
 - Use an object that is not transparent.
 - If the object that fills the screen is not focussed, correct the focus using "Manual Focus." → page 56
- Touch the OK (OK) tab.
 - The white balance setting will be applied and (WB) indicator is displayed.



白平衡

本高清数码摄像机会自动调整被摄主题的颜色。您可以根据录制条件更改白平衡设置。

设置	内容	屏幕显示
Auto(自动)	自动控制白平衡。	Keine
Daylight (日光)	根据室外环境，尤其是接近被摄主题的地方，适当地调整颜色。	
Cloudy(阴天)	适合在阴天的条件下使用。	
Fluorescent (荧光灯)	适合在荧光灯照明的环境下使用。	
Tungsten (钨丝灯)	适合在达不到钨丝灯 3200K 色温的环境下使用。譬如荧光灯。	
Custom WB (自定义白平衡)	您还可以根据光源等情况手动调节白平衡。	

手动设置白平衡:

- 触摸 "Custom WB(自定义白平衡)"
 - 显示指示图标 "Set White Balance (设置白平衡)"。
- 将镜头对准一个白色的物体，譬如白纸，使屏幕上全是白色。
 - 对准的物体不可以是透明的。
 - 如果不能聚焦该物体，请使用 "Manual Focus" (聚焦:手动)。→第56页
- 触摸OK导航键 (OK)。
 - 设置的白平衡被启用，并且显示指示图标 (WB)。

using the menu items



- A subject can be shot under various types of lighting conditions indoors (natural, fluorescent, candlelight, etc.). Because the color temperature is different depending on the light source, the subject tint will differ depending on the white balance settings. Use this function for a more natural result.
- It is recommended that you specify **"Digital Zoom: Off"** (→ page 62) before setting white balance.
- Do not use a colored object when setting white balance: The appropriate tint cannot be set.
- This function will be set to **"Auto"** in the EASY Q mode.
- Reset the white balance if lighting conditions change.
- During normal outdoor recording, setting to auto may provide better results.

Exposure

The HD camcorder usually adjusts the exposure automatically. You can also manually adjust the exposure depending on the recording conditions.

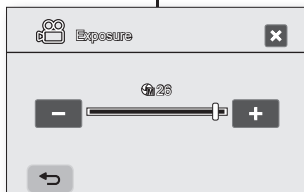
Settings	Contents	On-screen display
Auto	This option automatically adjusts image brightness according to the environmental light conditions.	None
Manual	You can adjust the brightness of an image manually. Adjust the brightness when the subject is too bright or too dark.	

Setting the exposure manually:

When manually setting the exposure, the default setting appears as the value is automatically adjusted according to the environmental light conditions.

Touch decrease (−) or increase (+) tab to adjust the exposure while viewing the image on the LCD screen.

- Exposure value can be set between "0" and "29."



使用菜单选项



- 录制一个主题可以在室内各种照明设备的环境下进行。(自然光, 荧光灯, 钨丝灯等。)。因为在不同光源下的色温有所不同, 所以白平衡设置后会有不同的色彩。使用本功能会得到更自然的效果。
- 在设置白平衡之前, 请将 **"Digital Zoom: Off"** (数字变焦: 关闭)(→第62页)。
- 不用使用带有颜色的物体设置白平衡。否则设置的色彩将会不自然。
- 在EASY Q模式下, 此功能将被设置为 **"Auto"** (自动)。
- 如果照明条件被改变, 请重新设置白平衡。
- 一般的户外录制, 设置到自动也许会获得更好的效果。

曝光

本高清数码摄像机通常会自动调节曝光。根据录制的条件, 您还可以手动调节曝光。

设置	内容	屏幕显示
Auto(自动)	根据照明环境, 会自动调节图像亮度。	无
Manual(手动)	您可以手动调节图像亮度。当被摄主题过亮或者过暗的时候调整亮度。	

手动设置曝光:

当手动设置曝光时, 根据周围环境的亮度, 默认设置的参数会自动显示在屏幕上。

通过LCD显示屏查看图像时, 触摸减小(−)或增大(+)导航进行调整曝光。

- 可以设置的曝光参数为从"0"至"29"。

Manual exposure is recommended in situations listed below:

- When shooting using reverse lighting or when the background is too bright.
- When shooting on a reflective natural background such as at the beach or when skiing.
- When the background is overly dark or the subject is bright.
-  When you manually change the exposure value when "Scene Mode (AE)" function is selected, manual changes are applied first.
- This function will be set to "Auto" in the EASY Q mode.

Anti-Shake (EIS: Electronic Image Stabilizer)

When you use zoom to record a magnified subject image, it will correct fuzziness in the recorded image.

Settings	Contents	On-screen display
Off	Disables the function.	None
On	Compensates for unstable images caused by camcorder-shake, particularly at high magnification.	

-  EASY Q mode automatically sets the "Anti-Shake" to "On."
- When "Anti-Shake: On" is set, there will be a slight difference between the actual movement and the movement on screen.
- Gross camcorder shake may not be entirely corrected even if "Anti-Shake: On" is set. Firmly hold the HD camcorder with both hands.
- It is recommended that you specify "Anti-Shake: Off" when using the HD camcorder on a desk or tripod (not supplied).
- When you record images with high magnification and the "Anti-Shake" is set to "On" in dark locations, after-images may stand out. In this case, we recommend using a tripod (not supplied) and turning the "Anti-Shake" to "Off."
- The Anti-Shake function will work only in Movie mode.

推荐在所列出的条件下使用手动曝光:

- 当使用反向照明设备发射光源或者当背景太明亮的时候。
- 当自然背景反射出强光的时候。譬如在沙滩或是滑雪场。
- 当背景过暗或是被摄主题比较明亮的时候。



- 当选择了 "Scene Mode (AE)" (场景模式 (AE)) 时, 如果您手动更改曝光参数, 手动更改内容会首先被应用。
- 在EASY Q模式下, 此功能将被设置为 "Auto(自动)"。

防震动 (EIS: 电子防震稳定器)

当您录制通过变焦扩大了的主题图像, 它可以改变录制结果模糊的情况。

设置	内容	屏幕显示
Off(关闭)	不使用此项功能。	无
On(打开)	应用改善由摄像机震动或者是高倍放大时录制到不稳定的图像。	



- EASY Q模式下, "Anti-Shake" (防震动) 自动设置为 "On" (打开)。
- 当 "Anti-Shake: On" (防震动: 打开), 屏幕上移动和相对移动的物体会略有区别。
- 即使 "Anti-Shake: On" (防震动: 打开), 也不能完全改善由于摄像机震动造成的影响。建议您还是用双手牢固地握住高清数码摄像机。
- 当 "Anti-Shake: Off" (防震动: 关闭) 时, 建议您还是使用三脚架 (未提供) 或者将数码摄像机放在桌子上使用。
- 当在阴暗位置用高放大率并在 "Anti-Shake" (防震动) 设置为 "On" (打开) 的情况下录制图像时, 背景图像可能会突出。在这种情况下, 建议您使用三脚架或者将 "Anti-Shake" (防震动) 调节至 "Off(关闭)" 的状态。
- 防震动功能仅使用在录制影音的过程中。

using the menu items

Digital Effect

The digital effect enables you to give a creative look to your recording. Select the appropriate digital effect for the type of picture that you wish to record and the effect you wish to create. There are 4 different digital effect options.

Settings	Contents	On-screen display
Off	Disables the function.	None
① Black & White	This mode changes the images to black and white.	
② Sepia	This mode gives the images a reddish brown pigment.	
③ Negative	This mode reverses the colors, creating a negative image.	
④ Art	This mode gives the images a coarse effect.	

 This function will be set to "Off" in the EASY Q mode.



Focus

The HD camcorder usually focusses on a subject automatically (auto focus). When the HD camcorder is turned on, auto focus will always be set. You can also manually focus a subject depending on the recording conditions.

Settings	Contents	On-screen display
Auto	In most situations, it is better to use the automatic focus feature, as it enables you to concentrate on the creative side of your recording.	None
Manual	Manual focussing may be necessary under certain conditions that make automatic focussing difficult or unreliable.	

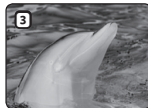
使用菜单选项

数字特效

数字特效为您录制的影音提供创造性的视觉效果。有四种不同的数字特效可供选择。

设置	内容	屏幕显示
Off(关闭)	不使用此功能。	无
① Black&White(黑白)	将图像变为黑白的。	
② Sepia(仿旧)	图像以深褐色显示，产生类似旧照片的效果。	
③ Negative(底片)	将颜色倒置，产生如底片的效果。	
④ Art(艺术)	为影音文件增加艺术效果。	

 在EASY Q模式下，此功能将设置为 "Off" (关闭)。



聚焦

高清数码摄像机通常会自动聚焦被摄的主题(自动聚焦)。根据录制的条件，您还可以对被摄主题进行手动聚焦。

设置	内容	屏幕显示
Auto(自动)	多数情况下，最好使用自动聚焦，这样能够更好的聚焦在您想要录制的部分。	无
Manual(手动)	在自动聚焦遇到困难的时候，也许您可以选择使用手动聚焦。	

Focussing manually during recording

This HD camcorder automatically focusses a subject from close-up to infinity.

However, the correct focus may not be obtained depending on the recording condition. In this case, use the manual focus mode.

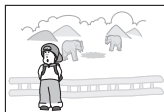
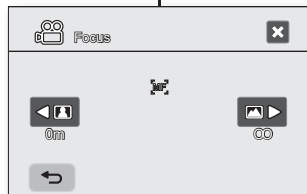
1. Touch "Focus" → "Manual."
 - The manual focus adjustment indicator appears.
2. Touch the nearer subject (👤) or farther subject (🏠) tab to adjust the focus, while viewing the subject on the LCD screen.

Focussing on a farther subject

To focus on a farther subject, touch the farther subject (🏠) tab.

Focussing in a nearer subject

To focus on a nearer subject, touch the nearer subject (👤) tab.



<Farther subject>



<Nearer subject>

In the following situations, you may obtain better results by adjusting the focus manually.

- A picture containing several objects, some close to the HD camcorder, others farther away.
- A person enveloped in fog or surrounded by snow.
- Very shiny or glossy surfaces like a car.
- People or objects moving constantly or quickly like an athlete or a crowd.



- "Focus" function will alternate between manual focus and auto focus. With auto focus, no indication will appear on the screen.
- Be sure to zoom in on your subject before manually focussing on it. If you bring the subject into focus at the "W" control side, focus will be faulty when you turn the zoom lever to the "T" control side to zoom in on the subject.
- If you are inexperienced in the use of HD camcorders, we recommend that you use auto focus.
- This function will be set to "Auto" in the EASY Q mode.
- The nearer or farther icon (👤/🏠) appears in the center when focus adjustment reaches the end.
- The adjusted value is applied right after touching the (👤) or (🏠) tab.

录制的过程中手动聚焦

本高清数码摄像机自动聚焦特写至无限大的被摄主题。然而，根据录制的情况也许不能够正确地聚焦。在这种情况下，建议您使用手动聚焦模式。

1. 触摸 "Focus" (聚焦) → "Manual" (手动)
 - 屏幕上显示手动聚焦调整指示图标。
2. 通过LCD显示观察被摄主题，触摸较近主题 (👤) 或较远主题 (🏠) 导航，调整聚焦。

聚焦一个较远的主题

聚焦一个较远的主题，触摸较远主题导航 (🏠)。

聚焦一个较近的主题

聚焦一个较近的主题，触摸较近主题导航 (👤)。

为了更好的效果，建议您在以下情况使用手动聚焦：

- 一个画面内存在很多物体，一些离数码相机较近，一些距离得比较远。
- 人被包围在雾里或者周围是一片雪。
- 如同汽车一样很亮或者表面非常光滑。
- 犹如运动员或者人群一样经常快速移动。



- 您可以交替使用手动聚焦和自动聚焦。但当使用自动聚焦时，屏幕上不会有相应的指示图标。
- 请务必在手动聚焦之前推近到您想要录制的主题。如果在您捕捉被摄主题的时候聚焦指示条在"W"端，则当您变焦控制杆拨到"T"端时，原来聚焦的焦点将会被破坏。
- 如果您没有使用高清数码摄像机的经验，我们建议您使用自动聚焦功能。
- 在EASY Q模式下，此功能被设置为 "Auto" (自动)。
- 当调整聚焦到头的时候，较近主题图标或较远主题图标 (👤/🏠) 会出现在屏幕的中心位置。
- 触摸 (👤) 或 (🏠) 导航键调整到应用的参数值。

using the menu items

Shutter

The HD camcorder automatically sets the shutter speed depending on the subject brightness. You can also manually adjust the shutter speed according to the scene conditions.

Settings	Contents	On-screen display
Auto	The HD camcorder automatically sets the appropriate aperture value.	None
Manual	Shutter speed can be set to 1/60, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, or 1/10000.	S.1/XXX

Setting the shutter speed manually

You can set the shutter speed manually. A fast shutter speed can freeze the motion of a fast moving subject and a slow shutter speed can blur the subject to give the impression of motion.

- Fast shutter speed allows a fast-moving subject to be captured one frame at a time vividly. Use these settings when an automatic adjustment does not work well with "Sports" mode in "Scene Mode (AE)." → page 52

Recommended shutter speed when recording

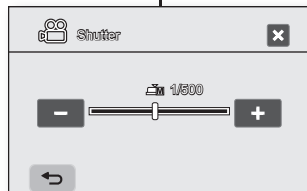
Shutter speed	conditions
1/60	The shutter speed is fixed at 1/60 second. Black bands that usually appear when shooting a TV screen become narrower.
1/100	The shutter speed is fixed at 1/100 second. Indoor sports such as basketball. The flickering that occurs when shooting under a fluorescent light or mercury-vapor lamp is reduced.
1/250, 1/500, 1/1000	Moving cars, trains or other rapidly moving vehicles such as roller coasters
1/2000, 1/4000, 1/10000	Outdoor sports such as golf and tennis.

使用菜单选项

快门

根据被摄主题周围的亮度，本高清数码摄像机自动调节快门速度。您也可以根据场景情况手动调节快门速度。

设置	内容	屏幕显示
Auto (自动)	本高清数码摄像机自动设置适当的光圈值。	无
Manual (手动)	快门速度可以设置到 1/60, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 或者 1/10000.	S.1/XXX



手动设置快门速度

您可以手动设置快门速度。使用高速的快门速度拍摄一个快速移动的主题会导致图像不连贯，使用较慢的快门速度会使画面模糊。

- 可以使用高速的快门速度捕捉快速移动主题的精彩一瞬。在“Scene Mode (AE)” (场景模式 (AE))的“Sports” (运动)模式下，当不能自动调整到最佳状态时，建议您使用这些设置。→ 第52页

在录制期间建议您使用的快门速度

快门速度	内容
1/60	快门速度固定在 1/60 每秒。当拍摄一个精密的电视屏幕通常显示黑带。
1/100	快门速度固定在 1/100 每秒。室内运动例如篮球。当在强光源下或水银蒸汽灯下进行拍摄时会闪烁。
1/250, 1/500, 1/1000	移动的汽车，火车以及运动的过山车。
1/2000, 1/4000, 1/10000	户外运动例如高尔夫球或者网球。



- If you manually change the shutter speed value when “**Scene Mode (AE)**” function is selected, manual changes are applied first.
- The image may not seem smooth when a slow shutter speed is set.
- This function will be set to “**Auto**” in the EASY Q mode.
- When recording with a shutter speed of 1/1000 or slower, make sure the sun is not directly shining into the lens.
- The shutter speed will work only in Movie mode.

Tele Macro

- This function is used to record a distant subject that is approaching.
- The effective focal distance in the Tele macro mode is between 50 Cm (19.7 inches) and 100 Cm (39.4 inches).

Settings	Contents	On-screen display
Off	Disables the function.	None
On	Tele macro is executed.	



- When recording in Tele macro mode, the focus speed may be lowered.
- When you operate the zoom function in the Tele macro mode, the recording subject may get out of focus.
- Use a tripod (not supplied) to prevent hand shake in the Tele macro mode.
- Avoid shadows when recording in the Tele macro mode.
- As the distance to the subject decreases, focussing area narrows.
- When you can not get proper focus, move the **Zoom** lever to adjust focus.
- This function will be set to “**Off**” in the EASY Q mode.



- 如果选定了“**Scene Mode (AE)**” (场景模式(AE))功能时，手动改变快门速度，那么手动改变值将首先生效。
- 当设置成慢速快门时，图像可能不连续。
- 在EASY Q模式下，此功能设置成“**Auto**” (自动)。
- 使用1/1000或更低的快门速度进行摄像时，确认镜头没有被阳光直射。
- 仅可以在影音模式下设置快门速度。

远程微距

- 此功能用于接近录制一个遥远的主题。
- 在远程微距模式下，有效的聚焦范围在50Cm (19.7英寸)和100Cm (39.4英寸)之间。

设置	内容	屏幕显示
Off(关闭)	不使用此功能。	无
On(打开)	启用远程微距。	



- 当使用远程微距模式进行录制的时候，聚焦速度可能会变慢。
- 当您在远程微距模式下使用变焦功能，录制的主题可能会偏离聚焦的位置。
- 在使用远程微距模式的时候，为了避免震动建议您使用三脚架（未提供）。
- 当使用远程微距模式录制的时候避免阴影。
- 当距离拍摄主题的距离减小，聚焦的区域变窄。
- 当您不能合适地聚焦时，建议您使用变焦控制杆调整聚焦。
- 在EASY Q模式下，此功能设置为“**Off**” (关闭)。

using the menu items

Quality

- You can select the quality of a movie to be recorded.
- Regarding detailed image capacity, see page 28.

Settings	Contents	On-screen display
[HD] Super Fine	Records in the HD format the highest quality mode. (Approx. 12Mbps)	 HD
[HD] Fine	Records in the HD format high quality mode. (Approx. 9Mbps)	 HD
[HD] Normal	Records in the HD format normal quality mode. (Approx. 6Mbps)	 HD
[SD] Standard	Records in the SD format standard quality mode. (Approx. 4Mbps)	 SD
[SD] Economy	Records in the SD format economy quality mode. (Approx. 2Mbps)	 SD



- The movie can be recorded in 1280x720 (HD) or 720x480 (SD) depending on the quality.
- Recorded files are encoded with Variable Bit Rate (VBR). VBR is an encoding system that automatically adjusts the bit rate according to the recording image.
- The recording times shown above are approximate and depend on the recording environment (i.e. lighting conditions).

Wind Cut

You can reduce wind noise when recording sound from the built-in microphone. If "Wind Cut: On" is set, the low-frequency components in the sound picked up by the microphone will be cut off during recording. This makes it easier to hear voice and sound during playback.

- Use the Wind Cut when recording in windy places such as a beach.

Settings	Contents	On-screen display
Off	Disables the function.	None
On	Minimises wind noise or other noise while recording.	



- When the "Wind Cut" is "On," some low frequency sound is eliminated along with the sound of the wind.
- Make sure the "Wind Cut" is set to "Off" when you want the microphone to be sensitive as possible.
- The Wind Cut function will work only during movie recording.
- The Wind Cut function works only with the built-in microphone.

使用菜单选项

质量

- 您可以选择录制影音图像的质量。
- 有关可录制的图像容量，请参见第28页

设置	内容	屏幕显示
[HD] Super Fine ([HD] 高清晰)	以 HD 格式最高质量模式录制。 (约 12Mbps)	 HD
[HD] Fine ([HD] 清晰)	以 HD 格式高质量模式录制。 (约 9Mbps)	 HD
[HD] Normal ([HD] 标准)	以 HD 格式标准质量模式录制。 (约 6Mbps)	 HD
[SD] Standard ([SD] 标准)	以 SD 格式标准质量模式录制。 (约 4Mbps)	 SD
[SD] Economy ([SD] 经济)	以 SD 格式经济质量模式录制。 (约 2Mbps)	 SD



- 根据选择质量情况，影音会以 1280x720 (HD) 或 720x480 (SD) 格式进行录制。
- 将用可变比特率 (VBR) 对已录制的文件进行编码。VBR 是一种编码系统，它根据录制的图像自动调整比特率。
- 上面显示的录制时间是近似时间，视录制环境（即光照条件）而定。

风声消除

当通过内置麦克风录制声音的时候可以减少风声噪音。如果 "Wind Cut: On" (风声消除：打开)，录制过程中有麦克风传入的低频率噪声将被消除：使得在播放的时候能够更容易地听到录制的声音。

- 在录制环境有风的地方使用风声消除功能，譬如海滩。

设置	内容	屏幕显示
Off (关闭)	不使用此功能。	无
On (打开)	当录制的时候将风声或者其它噪声减小到最小。	



- 当 "Wind Cut" (风声消除) 设置为 "On" (打开)，某些低频率的声音会与风声一起被消除。
- 若您欲使麦克风尽可能敏感的时候，请确保 "Wind Cut" (风声消除) 被设置为 "Off" (关闭)。
- 风声消除功能仅可在影音录制期间使用。
- 风声消除功能仅能在使用内置麦克风进行录制的时候起作用。

Back Light

When subject is lit from behind, this function will compensate for lighting so that the subject is not too dark.

Settings	Contents	On-screen display
Off	Disables the function.	None
On	- Backlight compensation is executed. - Backlight compensation brightens the subject quickly.	

Back lighting influences recording when the subject is darker than the background:

- The subject is in front of a window.
- The person to be recorded is wearing white or shiny clothes and is placed against a bright background; the person's face is too dark to distinguish his/her features.
- The subject is outdoors and the background is overcast.
- The light sources are too bright.
- The subject is against a snowy background.



<Back light off>

 This function will be set to "Off" in the EASY Q mode.

Fader

You can give your recording a professional look by using special effects such as fade in at the beginning of a sequence or fade out at the end of a sequence.

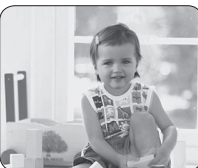
Settings	Contents	On-screen display
Off	Disables the function.	None
On	Fader is executed.	

背光补偿

当光源从被摄主题的后面照过来的时候，此功能可以增加被摄主题亮度，以至于被摄主题不会太暗。

设置	内容	屏幕显示
Off(关闭)	不使用此功能。	无
On(打开)	- 启用背光补偿。 - 背光补偿快速使被摄主题亮起来。	

当被摄主题比背景暗时，从后面照过来的光源会影响录制：



<Back light on>

- 被摄主题在窗户前。
- 被摄人物穿着白色或者明亮的衣服并且所处的位置背景光明亮；人物的脸色太暗以致于不能够很好地辨别他/她的容貌。
- 被摄主题在户外并且背景较暗。
- 照明光源过于明亮。
- 以雪地为背景。

 在EASY Q模式下，此功能设置为 "Off" (关闭)。

淡化器

为了使您拍摄的内容具有专业色彩，可以使用一些特殊的效果。例如在一个片段的开始使用淡入的手法，而在结束的时候使用淡出的手法。

设置	内容	屏幕显示
Off(关闭)	不使用此功能。	无
On(打开)	启用淡化器。	

using the menu items

Fade in

Press the **Recording start/stop** button when "Fader" is set to "On." Recording starts with a dark screen and then the image and sound are faded in. (fade in).

Fade out

When you want to stop recording with fade out, set "Fader" to "On" again during recording. Press the **Recording start/stop** button. Recording stops as the image and sound are faded out. (fade out).

Digital Zoom

You can select the maximum zoom level in case you want to zoom to a level greater than 10X (the default setting) during recording. Note that the image quality decreases when you use the digital zoom.



This right side of the bar shows the digital zooming factor. The zooming zone appears when you select the zooming level.

Settings	Contents	On-screen display
Off	Up to 10X zoom is performed optically.	None
On	Up to 10X zoom is performed optically, and after that, up to 2X zoom is performed digitally. (Zooming more than 10x is achieved digitally, up to 20x when combined with optical zoom.)	None



- The image quality may deteriorate depending on how much you zoom in on the subject.
- Maximum zooming may result in lower image quality.
- This function will be set to "Off" in the EASY Q mode.
- Digital Zoom function is not available when "Anti-Shake (EIS)" is "On." But, when setting "Anti-Shake (EIS)" to "On" with Digital Zoom on, Digital Zoom is released automatically.
- Digital Zoom is released automatically when Component or HDMI cable is connected.

使用菜单选项

Fade in (approx. 3 seconds)



Fade out (approx. 3 seconds)

淡入

当 "Fader" (淡化器) 设置为 "On" (打开) 的时候, 按下 **录制开始/停止** 按钮。录制在黑屏的情况下开始, 然后图像以及声音逐渐出现。(淡入)

淡出

如果您想要使用淡出效果退出录制, 在录制的过程中再次将 "Fader" (淡化器) 设置为 "On" (打开)。按下 **录制开始/停止** 按钮。

录制结束, 图像以及声音逐渐消失。(淡出)

数字变焦

在录制的过程中, 如果预得到大于 10x (默认设置) 的变焦值, 您可以通过变焦控制杆选择更大的变焦。注意当您使用数字变焦的时候会影响到录制图像的质量。



该指示条的右端显示数字变焦区域。当您选择该变焦操作的时候屏幕上显示变焦区域。

设置	内容	屏幕显示
Off (关闭)	仅使用 10x 的光学变焦。	无
On (打开)	不仅使用 10x 的光学变焦, 在此之外, 还可以使用达到 2x 的数字变焦。(运用 10x 光学变焦以后可以使用数字变焦, 数字变焦与光学变焦配合使用可放大 20x。)	无



- 根据您对被摄主题放大的倍数, 图像质量也许会有所下降。
- 最大变焦也许会降低图像质量。
- 在 EASY Q 模式下, 此功能设置为 "Off" (关闭)。
- 当将 "Anti-Shake (EIS)" (防震动 (EIS)) 设置为 "On" (打开) 时, 数字变焦功能不可用。但是, 当在数字变焦打开的情况下将 "Anti-Shake (EIS)" (防震动 (EIS)) 设置为 "On" (打开) 时, 将会自动退出数字变焦。
- 在连接分量或 HDMI 电缆线时, 会自动退出数字变焦。

Resolution

You can select the resolution of photo images to record.

Settings	Contents	On-screen display
2048x1536	Select to record at high resolution.	
1440x1080	Select to record at medium resolution.	
640x480	Select to record at low resolution.	



- Regarding detailed image capacity, see page 28.
- For photo development, the higher the resolution, the finer the image quality.
- The number of recordable images varies depending on the recording environment.
- Photo images that are recorded on your HD camcorder may not play back properly on other digital devices that do not support this photo size.
- High resolution images use more memory than lower resolution images. Therefore the higher the resolution selected, the less memory will be available to take photos.

Cont. Shot

- Continuous shot allows the user to take consecutive images of a moving object.
- Records images continuously up to the storage capacity.

Settings	Contents	On-screen display
Off	Disable the function.	None
On	Continuous shot is executed.	



- When an error (such as memory full) occurs during continuous recording, recording is ended and an error message is displayed.
- When pressing **PHOTO** button, it records continuously to a maximum number (15) of photo images at about 0.3 seconds intervals.

分辨率

您可以选择拍摄照片的分辨率。

设置	内容	屏幕显示
2048x1536	选择使用高分辨率拍摄。	
1440x1080	选择使用中等分辨率拍摄。	
640x480	选择使用低分辨率拍摄。	



- 有关可拍摄图像容量的详细内容，请参见第28页。
- 更高分辨率的图像具有更好的图像质量。
- 根据录制的具体情况，可记录的图像数量可能有所变化。
- 使用其他不支持此分辨率的设备拍摄的照片也许不能在本高清数码相机上查看。
- 高分辨率图像会比低分辨率图像占用更多的存储空间。所以选择高分辨率将会减少可拍摄照片的数量。

连续拍摄

- 连续拍摄允许用户对一个移动着的对象拍摄连贯的图像。
- 由存储容量决定连续拍摄图像的数量。

设置	内容	屏幕显示
Off(关闭)	不使用此功能。	无
On(打开)	启用连续拍摄功能。	

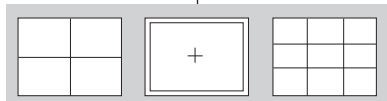


- 当在连续拍摄的期间发生错误（譬如存储器已满）时，拍摄结束并且显示错误提示信息。
- 当按下**PHOTO**按钮时，它将以约0.3秒的时间间隔连续拍摄最大数目(15)的照片图像。

using the menu items

Guideline

- Guideline displays a certain pattern on the LCD screen so that the user can easily design the image composition when recording movie or photo images.
- The HD camcorder provides 3 types of guidelines.



- Positioning the subject at the cross point of the guideline makes a balanced composition.
- This function works only in the quick menu.
- Guideline cannot be recorded on the images being recorded.

PLAYBACK MENU ITEMS

You can set up these menu items for playing movies.

Play Option

You can set up play options for movie image playback.

Settings	Contents	On-screen display
Play All	Plays movie images continuously starting from the selected one to the last and returns to the thumbnail index view.	
Play One	Plays the selected movie image only and returns to the thumbnail index view.	
Repeat All	Plays all the movie images repeatedly until touching Return (⏮) tab.	
Repeat One	Plays the selected movie image repeatedly until you touch the Return (⏮) tab.	

Cont. Capture

You can consecutively capture still images while playing a movie image by pressing the PHOTO button.

Settings	Contents	On-screen display
Off	Captures only one still image.	None
60 Copies / 1 sec	When plays movie images, a maximum of 60 still images per second are captured while the PHOTO button is pressed.	
5 Copies / 1 sec	When plays movie images, 5 still images per second are captured while the PHOTO button is pressed.	
2 Copies / 1 sec	When plays movie images, 2 still images per second are captured while the PHOTO button is pressed.	

使用菜单选项

指南

- 在LCD显示屏显示某一样式的指南，以便用户能够在录制影音或照片图像时更加容易地设计图像构成。
- 本高清数码摄像机为您提供3种类型指南。



- 放置主题在指南的交叉点做平衡的构成。
- 此功能仅在快捷菜单使用。
- 录制图像的过程中不会将指南同时记录下来。

播放菜单选项

您可以设置播放影音的菜单选项。

播放选项

您可以设置播放影音图像的菜单选项。

设置	内容	屏幕显示
Play All (全部播放)	连续播放影音图像（从所选图像开始到最后—幅图像），然后返回到索引画面。	
Play One (播放一个)	仅播放所选的影音图像，然后返回到索引画面。	
Repeat All (全部重复)	重复播放所有的影音图像直到触摸返回 (⏮) 导航键。	
Repeat One (重复一个)	重复播放所选的影音图像直到触摸返回 (⏮) 导航键。	

连续捕捉

在播放影音图像的过程中按下PHOTO按钮连续捕捉静态图像。

设置	内容	屏幕显示
Off (关闭)	仅捕捉一幅静态图像。	无
60 Copies / 1 sec (60幅 / 1)	播放影音图像时，若按住 PHOTO 按钮，可每秒捕捉到最多 60 幅静止图像。	
5 Copies / 1 sec (5幅 / 1)	播放影音图像时，若按住 PHOTO 按钮，可每秒捕捉到 5 幅静止图像。	
2 Copies / 1 sec (2幅 / 1)	播放影音图像时，若按住 PHOTO 按钮，可每秒捕捉到 2 幅静止图像。	



- The images are captured continuously while the **PHOTO** button is pressed.
- The number of the captured images varies depending on how long the **PHOTO** button is pressed.
- The interval that the images are captured continuously varies according to the continuous capture option.
- When an error (such as memory full) occurs during continuous capturing, capturing is ended and an error message is displayed.
- The captured images during playback are stored in the storage media in use.
- 1 second mentioned on the previous page is not the required time to capture the photo but the amount of 1 second (60 frames) that is divided into "copies" for capturing.

File Info

It shows you the image information. You can view the file name, creation date and size, etc.



This function is available only in the single image display mode.

Highlight

Shows a section of recorded movie images at random according to the total play time and number of files.

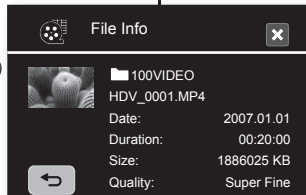
Settings	Contents	On-screen display
Recently	Shows a section of a movie image(s) that was created within 24 hours of the most recent one.	
All Days	Shows a section of all movie images.	



This function can be set only in the quick menu.



- 若按下了**PHOTO**按钮，则会连续捕捉图像。
 - 捕捉图像的数目视按下**PHOTO**按钮的时间长短而定。
 - 连续捕捉图像的间隔因连续捕捉选项而异。
- 当在连续捕捉的期间发生错误（譬如存储器已满）时，则连续捕捉结束并且显示错误提示信息。
- 播放过程中捕捉的图像被保存在存储介质内。
- 上一页中提到的1秒并非捕捉静态图像所需的时间，而是把1秒（60帧）的影音图像用连续捕捉的方式分为多少“幅”。



文件信息

显示图像信息。您可以查看文件名、创建日期和尺寸等等。



此功能仅支持在单画面全屏显示图像的模式下使用。

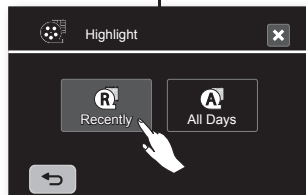
突出显示

根据文件的总播放时间和数量，随机显示部分录制的影音图像。

设置	内容	屏幕显示
Recently (最近)	显示 24 小时内创建的最新影音图像的一部分。	
All Days (所有日期)	显示所有影音图像中的一段。	



此功能仅可以在快捷菜单中进行设置。



using the menu items

SETTING MENU ITEMS

You can set up the date/time, OSD language, video output, and display settings of the HD camcorder.

Date/Time Set

Set the current date and time so they can be recorded correctly. ➔ page 25

Date/Time

You can set the date and time to display on the LCD screen.

- Before you use the “**Date/Time**” function, you must set the date and time.
➔ page 25

Settings	Contents	On-screen display
Off	Current date and time information is not displayed.	None
Date	Displays the current date.	JAN/01/2007
Time	Displays the current time.	12:00 AM
Date & Time	Displays the current date and time.	JAN/01/2007 12:00 AM



- The date/time will read “JAN/01/2007 12:00 AM” in the following conditions.
 - If the movie or photo recording was made before setting the date/time in the HD camcorder.
 - When the built-in rechargeable battery becomes weak or dead.
- The time and date when the movie or photo images are recorded are displayed in play mode.

File No.

File numbers are assigned to images in the order they were recorded.

Settings	Contents	On-screen display
Series	Assigns file numbers in sequence even if the memory card is replaced with another one or after formatting, or after deleting all files. The file number is reset when a new folder is created.	None
Reset	Resets the file number to 0001 even after formatting, deleting all or inserting a new memory card. Use “Reset” when the folder and files cannot be created anymore because the number of the folders and files reaches the limit.	None

使用菜单选项

设置菜单选项

您可以设置日期/时间, OSD语言, 视频输出, 以及其它高清数码摄像机的显示设置。

日期/时间设置

设置当前的日期和时间以便它们可以被准确地记录下来。 ➔第25页

日期/时间

您可以设置LCD屏幕上显示的日期/时间。

- 在使用 “**Date/Time**”(日期/时间)功能之前, 必须设置日期和时间。
➔第25页

设置	内容	屏幕显示
Off(关闭)	不显示当前日期和时间信息。	无
Date(日期)	显示当前日期。	01/01/2007
Time(时间)	显示当前时间。	12:00 上午
Date & Time(日期和时间)	显示当前日期和时间。	01/01/2007 12:00 上午



- 在以下情况, 日期/时间显示为 “01/01/2007 12:00 上午”。
 - 在进行录制影音或拍照之前, 未设置高清数码摄像机的日期/时间。
 - 当内置充电电池电量低或无电量时。
- 当录制影音或拍照时记录下时间和日期, 在播放的时候则会显示日期和时间。

文件编号

按照顺序编排录制的影音文件的编号。

设置	内容	屏幕显示
Series(连续)	按顺序分配文件编号, 即使换用了另一块存储卡、格式化后或删除所有文件后, 亦是如此。创建新文件夹时将复位文件编号。	无
Reset(重置)	在格式化, 删除全部或插入一个新存储卡后, 重新设置文件编号到 0001。 当因为文件夹和文件的数量到达极限, 文件夹和文件无法继续创建时, 使用 “Reset”(重置)。	无

LCD Control

- Your HD camcorder is equipped with a 2.7 inch wide color Liquid Crystal Display (LCD) screen, which enables you to view what you are recording or playing back directly.
- Depending on the conditions under which you are using the HD camcorder (indoors or outdoors for example), you can adjust LCD bright and LCD contrast.

Settings	Contents	On-screen display
Bright	Adjusts the brightness of the LCD screen.	None
Contrast	Adjusts the contrast of the LCD screen.	None

- Touch the decrease (◀) or increase (▶) tab to increase or decrease the value of a desired item.
- You can set values for LCD bright and LCD contrast between 0 and 35.
- Adjusting the LCD screen does not affect the brightness and contrast of the image to be recorded.

Storage Info

It shows you the storage information (the storage media, used space and available space, recordable time according to the quality). So you can find out how long you will be able to record on the storage media. Make sure to set the appropriate storage media.

Settings	Contents
Memory	You can view the used space, available space, and the recordable time on the built-in memory.
Card	You can view the used space, available space, and the recordable time on the memory card.

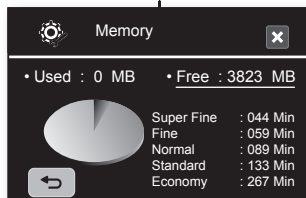
- The information of the memory card appears by touching "Storage Info." (SC-HMX10/HMX10N only)

LCD 控制

- 您的高清数码摄像机备有2.7英寸彩色液晶显示屏 (LCD)，以便您可以进行直接录制或播放。
- 根据您的高清数码摄像机四周的环境 (例如室内或室外)，您可以调节LCD亮度和LCD对比度。

设置	内容	屏幕显示
Bright (亮度)	调节 LCD 显示屏的亮度。	无
Contrast (对比度)	调节 LCD 显示屏的对比度。	无

- 触摸减小 (◀) 或增大 (▶) 导航键进行增大或减小适当的值。
- 您可以调节LCD亮度和LCD对比度的范围是0至35。
- 调整LCD显示屏的亮度和对比度不会对录制的图像造成影响。



存储信息

显示存储介质信息 (存储介质, 已用空间和可用空间, 以及根据录制质量的录制时间)。您可以通过查看存储信息找到您还可以录制多长时间。请确认设置到适当的存储介质。

设置	内容
Memory (内置存储器)	您可以查看内置存储器上的已使用空间、可用空间和可录制时间。
Card (存储卡)	您可以查看存储卡上的已使用空间、可用空间和可录制时间。

- 触摸 "Storage Info." (存储信息), 显示存储卡信息。(仅限SC-HMX10/HMX10N)

using the menu items

Format

You can use the “**Format**” function to completely delete all files and options on the storage media, including protected files.

Settings	Contents	On-screen display
Memory	You can format the built-in memory.	None
Card	You can format the memory card.	None



- If you execute the format function, all files will be deleted completely and the erased files cannot be recovered.
- Formatting the storage media using a different device will cause “**Read errors.**”
- A memory card with the protection tab set to lock will not be formatted. → page 29
- Format does not perform at the low battery.
- The memory card format is executed by touching “**Format.**” (SC-HMX10/HMX10N only)

Beep Sound

You can turn the beep sound on or off.

Settings	Contents	On-screen display
Off	Cancels the beep sound.	None
On	When on, a beep will sound every time a button is pressed.	None



Beep sound is off while recording movie.

Shutter Sound

You can turn the shutter sound on or off.

Settings	Contents	On-screen display
Off	Cancels the shutter sound.	None
On	When on, the shutter will sound with each press of the PHOTO button.	None

使用菜单选项

格式化

您可以通过“**Format**”(格式化)功能删除存储介质中的所有文件和选项,包括被保护的文件。

设置	内容	屏幕显示
Memory (内置存储器)	格式化内置存储器。	无
Card (存储卡)	格式化存储卡。	无



- 如果您执行格式化,所有文件将完全被删除并且删掉的文件无法恢复。
- 使用其它设备格式化存储卡会导致“**Read Error**”(读取错误)。
- 存储卡的写保护片设置为锁定的时候,则不能进行格式化。→第29页
- 当电池电量低时不能执行格式化
- 格式化存储卡通过触摸“**Format.**”(格式化)来执行。(仅限SC-HMX10/HMX10N)

蜂鸣音

您可以选择打开或关闭蜂鸣音。

设置	内容	屏幕显示
Off(关闭)	取消蜂鸣音。	无
On(打开)	开启状态下,每次按下按钮都可以听到蜂鸣音。	无



在录制影音的过程中蜂鸣音为关闭。

快门音

您可以选择打开或关闭快门音。

设置	内容	屏幕显示
Off(关闭)	取消快门音。	无
On(打开)	开启状态下,每次按下 PHOTO 按钮都可以听到快门音。	无

Auto Power Off

You can set the HD camcorder to automatically turn off when there is no operation for 5 minutes.

Settings	Contents	On-screen display
Off	The HD camcorder does not turn off automatically.	None
5 min	For power saving purposes, the HD camcorder will automatically turn off if there is no operation for 5 minutes only in standby mode.	None



- Auto Power Off function does not work when a USB cable is connected.
- When the Demo function is set to on, the Demo function works with priority rather than Auto Power Off function. If you want to turn off the HD camcorder automatically after 5 minutes, release the Demo function. ➔ page 71

LED Light

The LED light enables you to record a subject in dark places.

Settings	Contents	On-screen display
Off	Disable the function.	None
On	Record a clear image in the dark place without sacrificing color with LED light.	



- The LED light can become extremely hot.
- Do not touch it while in operation or soon after turning it off, otherwise serious injury may result.
- Do not place the HD camcorder into the carrying case immediately after using the LED light, since it remains extremely hot for some time.
- Do not use near flammable or explosive materials.



- The range of the LED light is limited. (Up to 6.6ft (2m))
- The LED light function will work only in Movie (📹) mode.

Rec Lamp

You can turn the recording indicator on the front of the camcorder on or off during movie or photo recording.

Settings	Contents	On-screen display
Off	Disable the function.	None
On	Turn on the recording indicator of the HD camcorder during record.	None

自动断电

您可以设置高清数码相机5分钟没有任何操作的情况下自动断电。

设置	内容	屏幕显示
Off(关闭)	不使用自动断电功能。	无
5 min (5分钟)	出于省电目的,在待机模式下,如果长达5分钟没有操作,高清数码相机将自动关闭。	无



- 如果连接了USB电缆,则“自动断电”功能不可用。
- 如果将“演示”功能设置为打开,则“演示”功能的优先级高于“自动断电”功能。如果希望在5分钟后自动关闭HD摄影机,请退出“演示”功能。➔第71页

LED灯

当您在—个黑暗的地方录制—个主题的时候可以选择,可以选择使用LED灯。

设置	内容	屏幕显示
Off(关闭)	不使用此功能。	无
On(打开)	开启LED灯,在—个黑暗的地方录制—个颜色不失真色清晰图像。	



- LED灯会发热。
- 不要在使用过程—中触摸LED灯或是关闭它之后马上触碰LED灯,否则会被烫伤。
- 刚使用过的LED灯仍有余热,不要在使用LED灯之后马上将高清数码相机放入便携包。
- 不要在易燃或易爆材料附近使用。



- LED灯的照明范围是有限的(最大值为6.6ft(2m))
- LED指示灯只能在影音录制(📹)模式下工作。

录制指示灯

您可以在录制影音或拍摄照片的时候,打开或者关闭摄像机前面的录制指示灯。

设置	内容	屏幕显示
Off(关闭)	不使用此功能。	无
On(打开)	在录制过程中,录制指示灯亮起。	无

using the menu items

Remote

This function allows you to enable or disable the remote control for use with the HD camcorder.

Settings	Contents	On-screen display
Off	Disable the function. The () indicator appears when you use the remote control.	None
On	You can control the HD camcorder with the remote control.	None

USB Connect

Using the USB cable, you can connect your HD camcorder to a PC to copy your movie images and photo images from the storage media, or to a printer to print your photo images.

Settings	Contents	On-screen display
Mass Storage	Connect to a PC.	None
PictBridge	Connect to a PictBridge printer.	None

TV Type

You can select the aspect ratio during playback on TV.

Settings	Contents	On-screen display
16:9	Select 16:9 to use the wide screen TV mode.	
4:3	Select 4:3 to use the standard display aspect ratio of 4:3.	



- This function is available when the HD camcorder is connected to a TV.
- TV type is set to on automatically when an HDMI cable is connected, so this function is deactivated.

Anynet+ (HDMI-CEC)

AnyNet+ is an AV network system that enables you to control all connected Samsung AV devices with AnyNet+ supported Samsung TV's remote control. You can use AnyNet+ function by connecting the HD camcorder to AnyNet+ supported TV with HDMI cable and set "AnyNet+ (HDMI-CEC)" to "On." For more details, refer to TV's user manual.

使用菜单选项

遥控

开启此功能，通过遥控器使用高清数码摄像机。

设置	内容	屏幕显示
Off(关闭)	不使用此功能。 当您使用遥控器的时候，屏幕上显示 () 指示图标。	无
On(打开)	使用遥控器控制高清数码摄像机。	无

USB连接

通过 USB 数据线连接您的高清数码摄像机至电脑，从存储介质中复制影音图像以及照片图像，或连接至打印机打印照片图像。

设置	内容	屏幕显示
Mass Storage (海量存储)	连接至电脑。	无
PictBridge	连接到 PictBridge 打印机。	无

TV类型

您可以选择电视机的高宽比用于播放。

设置	内容	屏幕显示
16:9	选择 16:9 宽屏幕 TV 模式。	
4:3	选择 4:3 标准高宽比显示模式。	



- 当高清数码相机连接至电视机的时候使用本功能。
- 当连接 HDMI 电缆时将自动设置电视类型，因此将取消激活此功能。

Anynet+ (HDMI-CEC)

AnyNet+ 是一种 AV 网络系统，它使您能够用支持 AnyNet+ 的 Samsung 电视的遥控器控制所有已连接的 Samsung AV 设备。可通过用 HDMI 电缆线将高清数码相机连接到支持 AnyNet+ 的电视并将 "AnyNet+ (HDMI-CEC)" 设置为 "On." (打开) 来使用 AnyNet+ 功能。有关详细信息，请参阅电视的用户手册。

Component Out

You can select the type of component video signal that is compatible with the connected TV.

Settings	Contents	On-screen display
Auto	The video signals are issued with the same format of the recorded file. Please use it only for connecting to HDTV. When the "Auto" is selected, indicator does not appear on the screen.	None
SD 480P	The recorded file is displayed with 480P format. Select it only when the TV to connect is for SD quality and it supports the progressive scan.	
SD 480i	The recorded file is displayed with 720x480i format. Select it to connect to an SD-quality TV that does not support progressive scan.	

Default Set

You can restore menu settings to default (initial settings at the factory) — pages 49-51



Initializing the HD camcorder settings to factory defaults does not affect recorded images.

Language

You can select a desired language to display the menu and messages.



"Language" options may be changed without prior notice.

Demo

Demonstration automatically shows you the major functions that are included with your HD camcorder so that you may use them more easily.

Settings	Contents	On-screen display
Off	Disables the function	None
On	Activates demonstration mode and shows various features.	None



- Demo function works after 5 minutes pass in STBY mode of movie mode.
- You can release Demo function as follows.
 - Touching any point on LCD screen / changing mode / pressing the button (Recording start/stop, Q.MENU, Display () / CHECK, EASY Q, or LCD enhancer ()
- Demo function does not work when the Multi-AV or component cable (only when "Component Out" is set to 480p or 480i) is connected to TV. Also Demo stops and it returns to STBY mode once above cables are connected.

分量输出

您可以选择分量视频信号的类型用于连接电视机。

设置	内容	屏幕显示
Auto (自动)	视频信号使用与录制的文件相同的格式。请仅在连接 HDTV 的时候使用此功能。当选择“自动”的时候，屏幕上不显示任何指示图标。	无
SD 480P	录制的文件以 480P 格式显示。当连接的电视机为 SD 质量标准并且支持逐行扫描的时候请选择使用此功能。	
SD 480i	录制的文件以 720x480i 格式显示。当连接的电视机为 SD 质量标准并且不支持逐行扫描的时候请选择使用此功能。	

默认设置

您可以将菜单设置项重置为默认设置（出厂初始设置）。—第49-51页



对高清数码相机进行初始化到出厂默认设置不会对录制的图像造成影响。

Language

您可以选择适当的显示菜单和信息的语言种类。



"Language"选项可能会更改，恕不另行通知。

演示

自动为您演示数码相机的大部分功能，方便您能够更加容易地使用数码相机。

设置	内容	屏幕显示
Off (关闭)	不使用此功能。	无
On (打开)	激活演示模式，为您演示各种特点。	无



- 在影音模式下待机5分钟以后演示功能启动。
- 您可以按照如下方法取消演示功能：
 - 触摸LCD显示屏上的任意点/更改模式/按下按钮（录制开始/停止, Q.MENU, 屏幕显示() / CHECK, EASY Q, 或LCD增强器()
- 如果将 Multi-AV 或分量视频电缆（仅当将“Component Out”(分量输出)设置为 480p或 480i时) 连接到电视，则“演示”功能不起作用。一旦连接了上述电缆之一，“演示”功能将会停止并返回到待机模式。

editing movie images

You can edit recorded movie images in various ways. To use Partial Delete, Divide, Combine, extra space more than at least 10MB is needed on the storage media. Movie image editing cannot be performed at the low battery.

DELETING A SECTION OF A MOVIE IMAGE

- This function works only in the Play mode. ➡ page 17
 - A movie image can be partially deleted.
1. Touch the Menu (☰) tab → "Edit" → "Partial Delete."
 - If the item is not on the screen, touch the up (⬆) /down (⬇) tab to scroll up or down to the next group of options.
 2. Touch a desired movie image.
 - The selected movie image will be paused.
 3. Search the start point of deletion by touching playback related (⏮, ⏪, ⏩, ⏭) tab.
 4. Touch the "✓" tab at the start point.
 - The start point of deletion will be marked with "▼."
 5. Touch the playback related (⏮, ⏪, ⏩, ⏭) tab to search the end point of deletion.
 - The end point of deletion will be marked with "▼."
 6. Touch the "✓" tab at the end point.
 - The end point of deletion will be marked with "▼."
 7. Touch the Cutting (✂) tab.
 - The message "Partial Delete? Selected part of a file will be deleted." will appear.
 8. Touch the "Yes."
 - The selected part of the movie image will be deleted.

- It operates identically in the full image display (single-image displayed on the screen).
- The protect (🔒) indicator will blink if you try to delete a movie image that was previously protected. You must first release the protect function to delete it. ➡ page 78
- A deleted part of the movie image cannot be recovered.
- If you want to edit from the first, touch the Return (⏮) tab.
- Partial deletion is not available when the recording is less than 3 seconds.
- Partial deletion is not available within 3 seconds section of the movie image and also isn't available within 3 seconds section of the remaining time.
- When partial deletion is executed, related movie images in the playlist are partially deleted.

编辑影音图像

您可以通过各种方法编辑录制的影音图像。要使用“部分删除”，“分割”或“合并”，存储介质上至少需要10MB额外的空间。

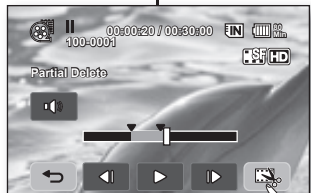
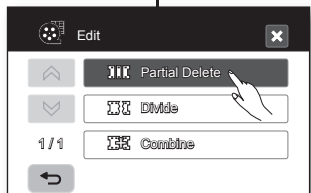
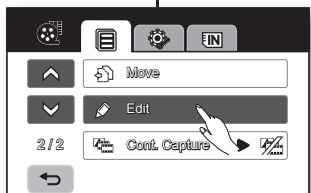
电池电量低时不能进行编辑影音图像。

删除被选的影音图像

- 此功能仅可在播放模式使用。➡第17页
- 影音图像会被删除一部分。

1. 触摸菜单导航(☰) → "Edit"(编辑) → "Partial Delete"(部分删除)
 - 如果屏幕上没有想要的选项，触摸上(⬆)/下(⬇)导航向上或向下滚动到下一组选项。
2. 触摸想要编辑的影音图像。
 - 被选的影音图像暂停播放。
3. 触摸播放影音图像，搜索要删除部分的开始点。(⏮, ⏪, ⏩, ⏭)导航键。
4. 在开始点触摸"✓"导航键。
 - 在要删除部分的开始点将会出现标记"▼"。
5. 触摸播放(⏮, ⏪, ⏩, ⏭)导航搜索要删除部分的结束点。
 - 在结束点触摸"✓"导航键。
6. 在结束点触摸"✓"导航键。
 - 再要删除部分的结束点将会出现标记"▼"。
7. 触摸剪切(✂)导航键。
 - 屏幕上出现提示信息"Partial Delete? Selected part of a file will be deleted." (部分删除? 将删除文件的选定部分)。
8. 触摸"Yes"(是)
 - 影音图像被选中的部分将被删除。

- 同样的操作在全屏显示的情况下。(屏幕上单面显示)
- 如果您试图删除一个被保护的影音图像，保护指示图标(🔒)会闪烁。
 - 您必须先解除保护功能才能删除它。➡第78页
- 被删除的影音图像不能恢复。
- 如果您想重新编辑，请触摸返回导航(⏮)。
- 当录制内容不足3秒时不能进行部分删除。
- 播放影音3秒钟之内不能进行部分删除，同样在影音播放的剩余时间少于3秒钟的时候，也不能够进行部分删除操作。
- 当执行部分删除功能时，播放列表中的影音图像部分也被删除。



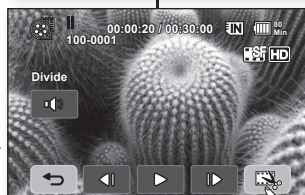
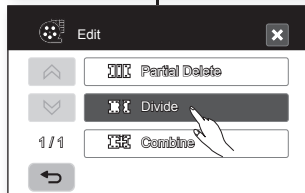
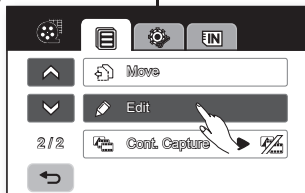
DIVIDING A MOVIE IMAGE

- This function works only in the Play mode. ↪ page 17
- You can divide a movie image as many times as you want in order to delete a section you no longer need. The movie images will be divided in groups of two.

- Touch the Menu (⋮) tab → “Edit” → “Divide.”
 - If the movie image thumbnail you want to edit is not on the screen, touch up (⬆) or down (⬇) tab to change the page.
- Touch a desired movie image.
 - The selected movie image will be paused.
- Search the point of division by touching playback related (▶, ⏮, ⏪, ⏩, ⏭) or (⏮, ⏭) tab.
- Touch the pause (⏮) tab at the point of division, then touch the Cutting (✂) tab.
 - The message “Divide a file at this point?” will appear.
- Touch the “Yes.”
 - After division, the original movie image is divided into the two movie images.
 - After dividing, you can delete the unnecessary movies or combine with other desired movies. ↪ pages 74, 79
 - The second image is placed in the last of thumbnail index view.



- The protect (🔒) indicator will blink if you try to divide a movie image that was previously protected. You must first release the protect function to divide it. ↪ page 78
- Search and slow playback are useful when designating division points.
- The division point may drift before or after the designated point by approximately 0.5 seconds.
- A movie image whose recording time is 3 seconds or less cannot be divided.
- Photo images cannot be divided.
- The divide function will work only in the thumbnail index view.
- When the movie image is divided, the first image of the divided images is stored in the playlist again.
- You can also access it by using the Q.MENU button. Press Q.MENU button. → Touch “Edit.” → Touch “Divide.”



分割影音图像

- 此功能仅在播放模式下使用。↪第17页
- 可以将视频图像分割多次，以删除不再需要的部分。视频图像将以一分为二的方式分割。

- 触摸菜单导航 (⋮) → “Edit”(编辑) → “Divide”(分割)。
 - 如果您想要编辑的影音图像不在当前屏幕的索引画面上，触摸上 (⬆) 或下 (⬇) 导航更换页面。
- 触摸选择想要分割的影音图像。
 - 被选择的影音文件暂停播放。
- 触摸与播放相关的导航键 (▶, ⏮, ⏪, ⏩, ⏭, ⏮, ⏭)，搜索分割点。
- 在分割点触摸暂停 (⏮) 导航键，然后触摸剪切 (✂) 导航键。
 - 屏幕上显示提示信息“Divide a file at this point?”(在此点分割文件吗？)
- 触摸“Yes”(是)
 - 分割之后，原来的影音图像被分割成两个影音图像。
 - 分割之后，您可以删除多余的影音图像或者与其它想要拼接的影音图像合并。↪第74, 79页
 - 第二个图像被放置在索引画面的最后。



- 如果您试图分割被保护的影音图像，则保护指示图标 (🔒) 会闪烁。您必须先将保护功能取消才能对影音图像执行分割。↪第78页
- 搜索和慢速播放指定分割点时非常有用。
- 分割点也许会偏离选定的点前后大约0.5秒。
- 录制时间少于等于3秒的图像无法被分割。
- 照片图像不能分割。
- 分割功能只能通过索引画面的菜单使用。
- 当分割视频图像时，分割出来的第一幅图像将再次存储在播放列表中。
- 您也可以通过使用 Q.MENU 按钮访问它。按下 Q.MENU 按钮。→ 触摸“编辑”。→ 触摸“分割”。

editing movie images

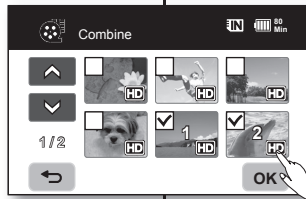
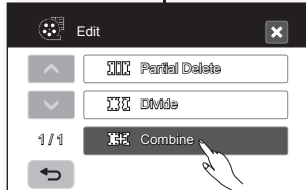
COMBINING TWO MOVIE IMAGES

- This function works only in the Play mode. ↪page 17
- You can combine two different movie images.

1. Touch the Menu (☰) tab → “Edit” → “Combine.”
 - If the movie image thumbnail you want to edit is not on the screen, touch up (⬆) or down (⬇) tab to scroll to the next group of options.
 2. Touch the movie images to be combined.
 - The (✓) indicator is displayed on the selected movie images.
 - Touching the movie thumbnail image toggles between the movie thumbnail image being selected for combining (the (✓) indicator appears on image) or not (the (✓) indicator is removed from image).
 3. Touch the OK (OK) tab.
- The message “Combine selected two files?” will appear.
4. Touch the “Yes.”
 - The thumbnail of the first movie image will appear in the combined movie image.



- It is not possible to combine two files that have different recording format (HD/SD).
 - You can not combine the protected images.
 - You must first release the protect function to paste it. ↪page 78
 - The two movie images are combined in the selected order and restored as a movie image.
 - The original movie images will not be preserved.
 - Photo images cannot be combined.
 - You can also access it by using the Q.MENU button.
- Press Q.MENU button → Touch “Edit.” → Touch “Combine.”
- A maximum of 2 movie images can be combined at a time.



编辑影音图像

合并两个影音图像

- 此功能仅可以在播放模式下使用 ↪第17页
- 您不能合并两幅不同质量的影音图像。

1. 触摸菜单导航 (☰) → “Edit”(编辑) → “Combine”(合并)
 - 如果屏幕上没有显示想要编辑的影音图像,触摸上(⬆)或下(⬇) 导航键滑动到下一组选项。
 2. 触摸想要合并的影音图像。
 - 选中的影音图像上显示指示图标(✓)。
 - 触摸影音索引画面被选的需要合并的图像(图像上显示指示图标(✓) 或不选(图像上的指示图标(✓)消失)。
 3. 触摸OK (OK) 导航。
- 屏幕上显示提示信息“Combine selected two files?”(合并选择的两个文件?)
4. 触摸“Yes”(是)。
 - 第一幅视频图像的缩略图将出现在合并的视频图像中。



- 两个录制格式不相同的文件无法进行合并 (HD/SD)。
 - 您不能合并受保护的图像。必须先解除保护功能才能进行合并。↪第78页
 - 将以所选顺序合并两幅影音图像并存储为一幅影音图像。
 - 将不会保存原始影音图像。
 - 不能合并照片图像。
 - 您也可以通过使用 Q.MENU 按钮访问它。
- 按下 Q.MENU 按钮→触摸“Edit”(编辑)→触摸“Combine”(合并)。
- 一次最多只能合并 2 幅图像。

PLAYLIST

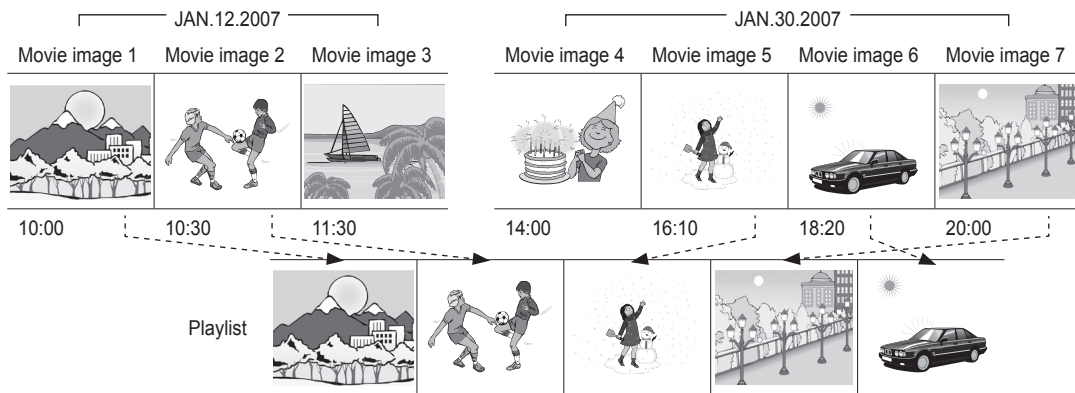
What's the "Playlist"?

The playlist is created by only the data on movie images so it will consume less storage capacity. When creating or deleting a playlist, the original movie image will not be erased. Moreover adding or deleting movie images from a playlist does not affect the original movie images.

播放列表

什么是“Playlist?”(播放列表)?

播放列表仅是由影音图像的数据创建的，因此它仅占用较少的存储容量。当创建或删除播放列表时，原始的影音图像并不会被删除。而且从播放列表增加或删除影音图像的时候并不会影响到原始的影音图像。

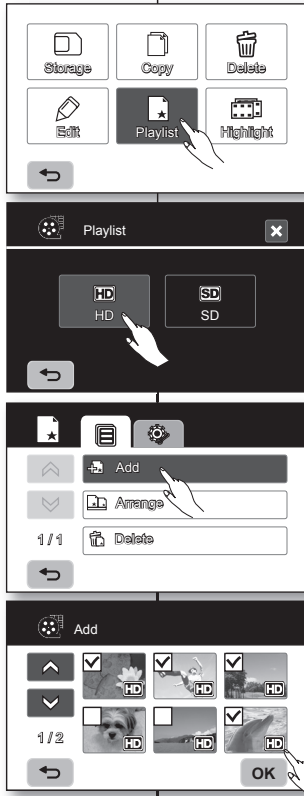


editing movie images

编辑影音图像

Creating the playlist

- This function works only in Play mode using the **Q.MENU** button. → page 47
 - You can create a playlist on this HD camcorder by gathering your favorites from the recorded movie images. Since the playlist is not created by copying data, you will consume less storage capacity by making a playlist.
- Press the **Q.MENU** button.
 - Touch the **"Playlist"** → **"HD"** or **"SD"** (creating playlist according to movie quality) → Menu (⏏) tab → **"Add."**
 - Select and touch the movie images to add to the playlist.
 - The (✓) indicator is displayed on the selected movie images.
 - Touching the movie thumbnail image toggles between the movie thumbnail image being selected for creating a playlist (the (✓) indicator appears on image) or not (the (✓) indicator is removed from image).
 - You can not select the different quality (HD/SD) movie image with the image being selected.
 - Touch the **OK (OK)** tab.
 - The message **"Add selected files to Playlist?"** will appear.
 - Touch the **"Yes."**
 - When creation of a playlist is complete, the thumbnail view of the playlist will appear.
 - You can play a playlist in the same manner as you play a movie image. → page 39
-  If free space available on the storage is insufficient, creation of new playlist may not be possible. Delete unnecessary movie images.
- Up to 64 movie images can be included in playlist.
 - When playing back the playlist, the counter refers to total counter of the playlist.
 - You can add a movie image to the playlist as the same manner above.



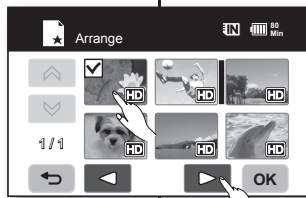
创建播放列表

- 本功能仅可在播放模式下通过**Q.MENU**按钮使用。→第47页
 - 您可以从录制的影音图像中挑选喜爱的影音图像在本高清数码摄像机上创建播放列表。因为创建播放列表只是复制数据，所以只会占用较少的存储容量。
- 按下**Q.MENU**按钮。
 - 触摸**"Playlist"**(播放列表) → **"HD"**或**"SD"**(根据影音质量创建播放列表) → 菜单(⏏)导航 → **"Add"**(添加)
 - 选择并且触摸影音图像添加到播放列表。
 - 被选的影音图像上显示指示图标(✓)
 - 触摸影音索引画面中想要添加到播放列表的图像(图像上显示指示图标(✓))或不选(图像上的指示图标(✓)消失)。
 - 在选择了图像的情况下，您不能选择另一质量(HD/SD)的影音图像。
 - 触摸**OK (OK)** 导航。
 - 屏幕上显示提示信息**"Add selected files to Playlist?"**(将选择的文件添加至播放列表?)。
 - 触摸**"Yes"**(是)。
 - 当完成创建播放列表，屏幕上将显示播放列表的索引画面。
 - 与播放一个影音图像同样的方式打开一个播放列表。→第39页
-  如果空余存储空间不足，不可能创建一个新的播放列表。请删除多余的影音图像。
- 播放列表最多可以容纳64个影音图像。
 - 当播放播放列表时，播放的文件数是根据播放列表的总文件数编排的。
 - 按照以上同样的方式添加一个影音图像至播放列表。

Arranging the order of movie images within a playlist

You can arrange movie images within a playlist by moving them to desired positions.

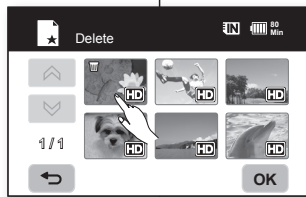
1. Touch the **"Playlist"** → **"HD"** or **"SD"** (arranging playlist according to movie quality) → Menu (☰) tab → **"Arrange."**
2. Touch the movie image to be moved.
 - The (✓) indicator is displayed on the selected movie images.
 - Touching the movie thumbnail image toggles between the movie thumbnail image being selected for arranging (the (✓) indicator appears on image) or not (the (✓) indicator is removed from image).
 - A bar will also appear next to the movie image.
3. Touch the previous (◀) or next (▶) tab to move the bar to the position of your choice, then touch the **OK (OK)** tab.
 - The selected movie image will be moved to the new position.



Deleting movie images from a playlist

You can delete undesired movie images within playlist.

1. Touch the **"Playlist"** → **"HD"** or **"SD"** (deleting playlist according to movie quality) → Menu (☰) tab → **"Delete."**
2. Touch the movie image to be deleted.
 - The (✖) indicator is displayed on the selected movie images.
 - Touching the movie thumbnail image toggles between the movie thumbnail image being selected for deletion (the (✖) indicator appears on image) or not (the (✖) indicator is removed from image).
3. Touch the **OK (OK)** tab.
 - The message **"Delete selected files from Playlist? Original file is not deleted."** will appear.
4. Touch the **"Yes."**
 - The selected playlists will be deleted.



在播放列表内排列影音图像

您可以在播放列表内排列影音图像。

1. 触摸**"Playlist"**(播放列表) → **"HD"**或**"SD"**(根据影音质量排列播放列表) → 菜单(☰)导航 → **"Arrange"**(排列)。
2. 触摸想要移动的影音图像。
 - 被选的影音图像上显示指示图标(✓)。
 - 触摸影音索引画面中想要排列的图像(图像上显示指示图标(✓)或不选(图像上的指示图标(✓)消失)。
 - 影音图像的旁边会出现一个竖条。
3. 触摸向后(◀)或向前(▶)导航移动竖条到您想要选择的位置, 然后触摸**OK (OK)**导航。
 - 被选的影音图像将会移动到一个新的位置。

从播放列表删除影音图像

您能删除播放列表内不想要的影音图像。

1. 触摸**"Playlist"**(播放列表) → **"HD"**或**"SD"**(根据影音质量删除播放列表) → 菜单(☰)导航 → **"Delete"**(删除)。
2. 触摸想要删除的影音图像。
 - 被选的影音图像上显示指示图标(✖)。
 - 触摸影音索引画面中想要删除的图像(图像上显示指示图标(✖)或不选(图像上的指示图标(✖)消失)。
3. 触摸**OK (OK)**导航。
 - 屏幕上显示提示信息**"Delete selected files from Playlist? Original file is not deleted."**(从播放列表中删除选择的文件? 不会删除原始文件。)
4. 触摸**"Yes"**(是)
 - 播放列表中被选的影音图像将被删除。

image management

This chapter describes information about movie or photo file management tools such as protection, deletion, copy, and move. Image management cannot be performed at the low battery.

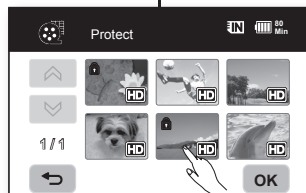
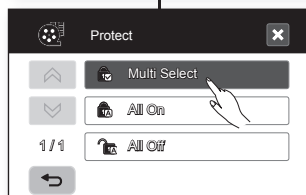
PROTECTION FROM ACCIDENTAL ERASURE

- This function works only in the Play mode. ↪ page 17
 - You can protect important images from accidental erasure.
 - If you execute formatting, all files including protected files will be erased. ↪ page 68
- Touch the Movie (🎬) tab or Photo (📷) tab.
 - Touch the Menu (☰) tab → **"Protect."**
 - Touch the desired option tab on the screen ("Multi Select," "All On" or "All Off").
 - "Multi Select"**: Protects individual images.
 - To protect individual images, touch image to select images to protect. The (🔒) indicator is displayed on the selected movie images. Touching the thumbnail image toggles between the protection (the (🔒) indicator appears on image) or not (the (🔒) indicator is removed from image). Touch OK (OK) tab.
 - "All On"**: Protects all images.
 - To protect all images, simply touch the "All On."
 - "All Off"**: Releases the protected images all at once.
 - The message according to the selected option will appear. Touch the **"Yes."**
 - After completing, the selected images will be protected.
- 
- This function operates identically in the full image display mode (single-image displayed on the screen).
 - Protected images will show the (🔒) indicator when they are displayed.
 - If the write protection tab on the memory card is set to lock, you cannot set image protection. ↪ page 29

图像管理

本章节为您介绍有关影音或照片文件管理工具的信息。譬如保护、删除、复制和移动。电池电量低时不能执行图像管理。

保护图像



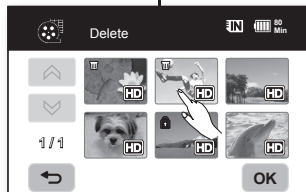
- 此功能仅可在播放模式下使用。↪第17页
 - 您可以保护重要的图像免受偶然删除。
 - 如果您执行格式化，所有的文件包括被保护的文件将被删除。↪第68页
- 触摸影音 (🎬) 导航或照片 (📷) 导航。
 - 触摸菜单 (☰) 导航 → **"Protect" (保护)**
 - 触摸屏幕上想要选择的选项 ("Multi Select" (多项选择) "All On" (全部打开) 或 "All Off" (全部关闭))。
 - "Multi Select" (多项选择)**: 保护个别的图像。
 - 预保护个别的影音图像，触摸该图像选择保护。屏幕上被选定的图像上显示指示图标 (🔒)。触摸影音索引画面中想要保护的图像 (图像上显示指示图标 (🔒)) 或不选 (图像上的指示图标 (🔒) 消失)。触摸 OK (OK) 导航键。
 - "All On" (全部打开)**: 保护全部图像。
 - 保护全部图像，仅需简单地触摸 "All On" (全部打开)。
 - "All Off" (全部关闭)**: 取消保护全部影音图像。
 - 屏幕上显示提示信息。触摸 "Yes" (是)。
 - 完成后，所选的图像即被保护。

- 
- 在全屏显示模式下，也有相同的操作。屏幕上显示单画面。
 - 受保护的影音图像上显示相应的指示图标 (🔒)。
 - 如果存储卡上的写保护片被锁上，您将无法设置保护图像。↪第29页

DELETING IMAGES

- This function works only in the Play mode. ➔ page 17
- You can erase the images recorded on the storage media.
- An image that has been deleted cannot be recovered.

1. Touch the Movie (🎬) tab or Photo (📷) tab.
 2. Touch the Menu (☰) tab ➔ “Delete.”
 3. Touch the desired option tab on the screen (“Multi Select” or “All”).
 - “Multi Select”: Deletes individual images.
 - To delete individual images, touch image to select images to delete. The (👉) indicator is displayed on the selected images. Touching the thumbnail image toggles between the thumbnail image being selected for deletion (the (👉) indicator appears on image) or not (the (👉) indicator is removed from image). Touch OK (OK) tab.
 - “All”: Deletes all images.
 - To delete all images, simply touch the “All.”
 4. The message according to the selected option will appear. Touch the “Yes.”
 - After completion, selected images will be deleted. (Accordingly the deleted files also disappear in playlist. ➔ page 76)
- 
- This function operates identically in the full image display mode (single-image displayed on the screen).
 - To protect important images from accidental deletion, activate the image protection. ➔ page 78
 - The protect (🔒) indicator will blink if you try to delete a image that was previously protected. ➔ page 78
 - You must release the protect function to delete the image.
 - If the write protection tab on the memory card is set to lock, you cannot delete. ➔ page 29
 - You can also format the storage media to delete all the images at once.
- Be aware that all files and data including protected files will be erased. ➔ page 68
- In the quick menu, you can delete all files only (you cannot delete a file individually).



删除图像

- 此功能仅可以在播放模式下使用。➔第17页
 - 您可以删除记录在存储介质上的图像。
 - 被删除的图像无法恢复。
1. 触摸影音(🎬)导航或者照片(📷)导航。
 2. 触摸菜单导航(☰) ➔ “Delete”(删除)。
 3. 触摸屏幕上想要选择的选项导航 (“Multi Select”(多项选择)或“All”(全部))。
 - “Multi Select”(多项选择): 删除选择的图像。
 - 触摸想要删除的图像。
被选择的图像上显示(👉)指示图标。
触摸影音索引画面中想要删除的图像(图像上显示指示图标(👉))
或不选(图像上的指示图标(👉)消失)。触摸OK(OK) 导航键。
 - “All”(全部): 删除全部图像。
 - 删除全部图像, 仅需简单地触摸“All”(全部)。
 4. 根据所选选项显示提示信息。触摸“Yes”(是)。
 - 完成后, 所选图像即被删除。(被删除的文件也将消失在播放列表。➔第76页)
- 
- 在全屏显示模式下, 也有相同的操作。屏幕显示单画面)。
 - 保护重要的图像以免被偶然删除, 激活图像保护功能。➔第78页
 - 如果您试图删除一个被保护的图像, 保护指示图标(🔒)便会闪烁。➔第78页
您必须在删除图像之前解除该图像的保护功能。
 - 如果存储卡的写保护卡锁定, 则不能删除存储卡上的文件。➔第29页
 - 您也可以格式化存储介质来立即删除全部图像。
注意, 所有文件和数据包括被保护的数据也将被删除。➔第68页
 - 通过Q.MENU, 您仅可以选择删除全部文件(无法删除单独的一个文件)。

image management

COPYING IMAGES (SC-HMX10A/HMX10C/HMX10CN/HMX10ED ONLY)

- This function works only in the Play mode. ↪ page 17
- You can copy images between built-in memory and memory card.
- Images are copied to the destination storage while leaving original images in the source storage. (It copies from the currently-used storage to another. For example, if the built-in memory is used, it copies to a memory card.)
- Make sure that the memory card has been inserted.

1. Touch the Movie (🎬) tab or Photo (📷) tab.
2. Touch the Menu (☰) tab → “Copy”.
3. Touch the desired option tab on the screen (“Multi Select” or “All”).
 - “Multi Select”: Copy individual images.
 - Touch images you want to copy. The (👉) indicator is displayed on the selected movie images. Touching the thumbnail image toggles between the thumbnail image being selected for copying (the (👉) indicator appears on image) or not (the (👉) indicator is removed from image). Touch OK (OK) tab.
 - “All”: Copy all images.
 - To copy all images, simply touch the “All”.
4. The message according to the selected option will appear. Touch the “Yes.”

-  • If free space available on the storage is insufficient, copying may not be possible. Delete unnecessary images. ↪ page 79
- Be sure to connect AC power adaptor when using copy function.
 - In the quick menu, all the movie thumbnail images are selected. Touch the movie thumbnail image you don't want to copy. The (👉) indicator disappears from the image. Also, if there is insufficient space in the destination storage to copy, files are selected in the order from the first as long as the space allows.

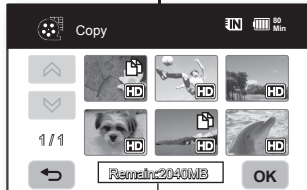
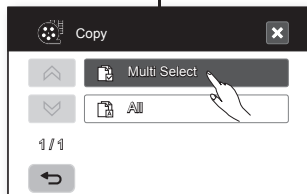
图像管理

复制图像（仅限 SC-HMX10A/HMX10C/HMX10CN/HMX10ED）

- 此功能仅可以在播放模式下使用。↪第17页
- 您可以在内置存储器和存储卡之间复制图像。
- 图像被复制到另一个存储介质上，而原始图像仍保留在原来存储的位置。
(它可以文件从当前的存储介质复制到另一个存储介质。例如，将文件从内置存储器复制到存储卡。)
- 请确保已经插入存储卡。

1. 触摸影音 (🎬) 导航或照片 (📷) 导航。
2. 触摸菜单导航 (☰) → “Copy”(复制)。
3. 触摸屏幕上的选项导航。(“Multi Select”(多项选择)或“All”(全部))。
 - “Multi Select”(多项选择): 复制所选的图像。
 - 触摸您想要复制的图像。
被选的影音图像上显示指示图标(👉)。触摸影音索引画面中想要复制的图像(图像上显示指示图标(👉))或不选(图像上的指示图标(👉)消失)。触摸OK (OK) 导航键。
 - “All”(全部): 复制全部图像。
 - 复制全部图像，仅需简单地触摸“All”(全部)。
4. 根据所选项显示提示信息。触摸“Yes”(是)。

-  • 如果存储空间不足，则不可能进行复制操作。请删除一些多余的图像。
↪第79页
- 在使用复制功能的时候请务必连接交流电源适配器。
 - 在Q.MENU中，所有影音索引图像都处于选中状态。触摸不想复制的影音索引图像。(👉) 指示符就会从图像中消失。而且，如果目的地存储介质的存储空间不足，在存储空间允许的条件下文件将按照被选择的顺序开始复制。



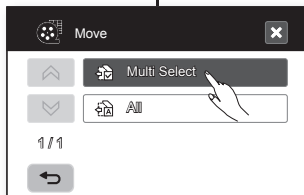
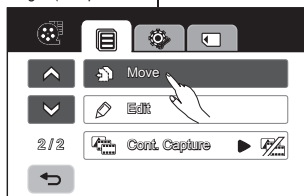
Remaining capacity of destination storage

MOVING IMAGES (SC-HMX10A/HMX10C/HMX10CN/HMX10ED ONLY)

- This function works only in the Play mode. ➡ page 17
- You can move images between built-in memory and memory card.
- Images are moved to the destination storage. The original images (except read only files) in the source storage are deleted. (It moves from the currently-used storage to another. For example, if the built-in memory is used, it moves to a memory card.)
- Make sure that memory card has been inserted.

1. Touch the Movie (🎬) tab or Photo (📷) tab.
2. Touch the Menu (☰) tab → "Move."
3. Touch the desired option tab on the screen ("Multi Select" or "All").
 - "Multi Select": Moves individual images.
 - Touch images you want to move. The (👉) indicator is displayed on the selected movie images. Touching the thumbnail image toggles between the thumbnail image being selected for moving (the (👉) indicator appears on image) or not (the (👉) indicator is removed from image). Touch **OK** (👉) tab.
 - "All": Moves all images.
 - To move all images, simply touch the "All."
4. The message according to the selected option will appear. Touch the "Yes."

- 
- Protected images could not be moved. You must release the protect function to move the image. ➡ page 78
 - If the write protection tab on the memory card is set to lock, you cannot move.
 - If free space available on the storage is insufficient, moving images may not be possible. Delete unnecessary images. ➡ page 79
 - Be sure to connect AC power adaptor when using the move function.



Remaining capacity of destination storage

移动图像（仅限 SC-HMX10A/HMX10C/HMX10CN/HMX10ED）

- 此功能仅可以在播放模式下使用。➡第17页
 - 您可以在内置存储器与存储卡之间移动图像。
- 您可以将图像移至目标存储器。将删除原存储器中的原始图像（只读文件除外）。（它从当前的存储介质移动到另一个存储介质。例如，如果当前使用的是内置存储器，则它被移动到存储卡。）
 - 请确保已经插入了存储卡。
1. 触摸影音(🎬)导航或照片(📷)导航。
 2. 触摸菜单导航(☰) → “Move”(移动)。
 3. 触摸屏幕上的选项导航。（“Multi Select”(多项选择)或“All”(全部)）。
 - “Multi Select”(多项选择)：移动所选的图像。
 - 触摸想要移动的图像。
被选的影音图像上显示指示图标(👉)。
触摸影音索引画面中想要移动的图像（图像上显示指示图标(👉)）或不选（图像上的指示图标(👉)消失）。触摸**OK** (👉) 导航键。
 - “All”(全部)：移动全部图像。
 - 移动全部图像，仅需简单地触摸**All”(全部)**。
 4. 根据所选项显示提示信息。触摸**“Yes”(是)**。



 - 被保护的的文件不可以移动。您必须在进行移动操作之前解除该文件的保护功能。➡第78页
 - 如果存储卡的写保护锁定，则不能使用移动功能。
 - 如果存储空间不足，则不可能进行移动操作。请删除一些多余的图像。➡第79页
 - 当使用移动功能时，请确保连接交流电源适配器。

printing photo images

You can print photo images by inserting the DPOF setting card to the DPOF-compatible printer or connecting the HD camcorder to the PictBridge printer.

DPOF PRINT SETTING

- Print Mark (DPOF) can be set only on photo images stored in the memory card.
- This function works only in the Play mode. → 第17页
- This HD camcorder is compatible with DPOF (Digital Print Order Format). You can set which images to be printed and the number of prints with this HD camcorder. This feature is useful to print with a DPOF-compatible printer or when bringing storage media to a photo lab for printing.

- Touch the Photo (📷) tab.
- Touch the Menu (☰) tab → Storage (💾) tab → "Card."
- Touch the Menu (☰) tab → "Print Mark (DPOF)."
- Touch the desired option tab on the screen ("Select," "Set All" or "Reset All").
 - "Select": Print-marks individual images.
 - Touch image to select images to print. The (👤) indicator is displayed on the selected images. The photo thumbnail image toggles between the photo thumbnail image being selected for printing (the (👤) indicator appears on image) or not (the (👤) indicator is removed from image). Touch OK (OK) tab.
 - "Set All": Print-marks all images.
 - Simply touch the "Set All."
 - "Reset All": Removes the print mark.
 - Touch the "Reset All."
- The message according to the selected option will appear and touch the "Yes."

You can set the number of prints in the single display view only. Select the photo image to print in the single display mode, and touch the Menu (☰) tab → "Print Mark (DPOF)" → decrease (➖) or increase (➕) tab (select the number of printing). Up to 99 copies can be set to print of each image.



- This function operates identically in the full image display mode (single-image displayed on the screen).
- Print marked photo images will show the (👤) indicator when they are displayed.
- The "Reset All" and "Set All" options may take a long time depending on the number of stored images.

打印照片图像

可通过将DPOF设置卡插入到与DPOF兼容的打印机中或将高清数码相机连接到PictBridge打印机来打印照片图像。

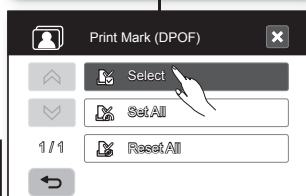
DPOF 打印设置

- 只能对存储在存储卡上的照片图像设置打印标记 (DPOF)
- 此功能仅可以在播放模式下使用。→ 第17页
- 本高清数码相机兼容DPOF (数字打印命令格式)。您可以通过本高清数码相机设定打印的图像并且设置打印的数量。它的特点是您可以直接与DPOF兼容打印机连接后直接打印或者将存储卡带到冲印店来打印照片。

- 触摸照片 (📷) 导航。
- 触摸菜单 (☰) 导航 → 存储 (💾) 导航 → "Card" (存储卡)。
- 触摸菜单导航 (☰) → "Print Mark (DPOF)" (打印标识(DPOF))。
- 触摸屏幕上的选项导航 ("Select" (选择) "Set All" (设置全部) 或 "Reset All" (重设全部))。
 - "Select" (选择): 打印标识在个别的图像。
 - 触摸选择要打印的图像。被选的图像上显示指示图标 (👤)。
 - 触摸影音索引画面中想要打印的图像 (图像上显示指示图标 (👤) 或不选 (图像上的指示图标 (👤) 消失)。触摸OK (OK) 导航键。
 - "Set All" (设置全部): 打印标识在全部图像。
 - 简单地触摸 "Set All" (设置全部)。
 - "Reset All" (重设全部): 重设打印标识。
 - 触摸 "Reset All" (重设全部)。
- 根据所选显示提示信息。触摸 "是"。

您仅可以在单画面显示的情况下设置打印数量。在单画面显示模式选择要打印的照片图像，并且触摸菜单导航 (☰) → "Print Mark (DPOF)" (打印标识(DPOF)) → 减少 (➖) 或增加 (➕) 导航 (选择打印数量) 每张图像可以最多设置打印99张。

- 在全屏显示模式下，也有相同的操作。(屏幕上显示单画面)。
- 当它们显示的时候，打印标识的指示图标 (👤) 将出现在照片图像上。
- "Reset All" (重设全部) 和 "Set All" (设置全部) 选项可能需要很长时间，视已存储图像的数量而定。



DIRECT PRINTING WITH A PICTBRIDGE PRINTER

If your printer is compatible with PictBridge, photo images can be printed easily by connecting the camcorder with the USB cable directly to the printer.

DPOF setting can also be used.

→ page 82

NOTICE: After selecting "PictBridge" in the menu, connect the USB cable.

1. Set the "USB Connect" to "PictBridge". → page 70
2. Connect your HD camcorder to the printer using the provided USB cable.
3. Turn your printer power on.
 - The thumbnail index view of the photo image will appear.
4. Touch a photo image to print, then touch the Print (🖨️) tab.
 - To search photo image, touch the previous image (⏮️) or next image (⏭️) tab.
 - The selected photo image will be printed.
 - After the connection, the easy printing menu will display on the LCD screen. To display the PictBridge menu, touch the Menu (☰) tab. For more information about the PictBridge menu, refer to page 84.

Setting the number of copies to print

Touch decrease (➖) or increase (➕) tab to select the number of copies to print.

- If the image moves to the previous or next, the number of copies is reset.

To cancel print setting

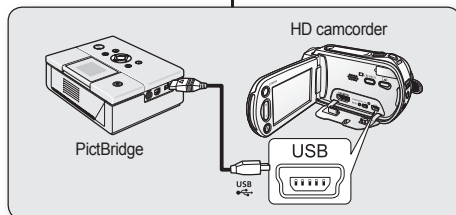
Touch the Return (⏮️) tab on the screen.

To stop printing after printing starts

The confirmation screen appears while printing.

Touch the "Cancel" on the screen.

通过 PICTBRIDGE 打印机直接打印



如果您的打印机兼容PictBridge,便可以
通过USB数据线连接至打印机更方便
地打印照片。DPOF设置也可以使用。

→第82页

注意: 请在菜单中选择设
置"PictBridge"后连接USB数据线。

1. 设置"USB Connect"(USB连接)到"PictBridge"。→第70页
2. 使用提供的USB数据线将您的高清数码摄像机连接至打印机。
3. 开启打印机。
 - 显示照片图像索引画面。
4. 触摸要打印的照片图像,然后触摸打印导航(🖨️)。
 - 触摸上一个图像(⏮️)或者下一个图像(⏭️)导航键,搜索要打印的照片图像。
 - 打印被选的照片图像。
 - 连接后, LCD显示屏上会出现打印菜单。显示PictBridge菜单,触摸菜单导航(☰)。有关PictBridge 菜单更详细的信息,请参见第84页。



设置打印份数

触摸减少(➖)或增加(➕)导航以选择打印份数。

- 如果图像移至前一个或下一个图像,则会重置份数。

取消打印设置。

触摸屏幕上的返回导航(⏮️)。

打印开始后停止打印

在打印的过程中将会显示确认信息。

触摸屏幕上的"Cancel"(取消)。

printing photo images

PictBridge menu

Setting the date/time imprint option

Touch the Menu (☰) tab → “Date/Time” → “Off”, “Date”, “Time”, or “Date & Time” → Return (↩) tab.

To print using the DPOF setting

If the printer is compatible with DPOF, you can use the DPOF setting. → page 82



- If the printer is not recognised, or to print again after direct printing with a PictBridge printer, remove the USB cable, select “PictBridge” in the menu again, and then reconnect the cable.
- If the “USB Connect” menu is set to “Mass Storage” you cannot connect a PictBridge compatible printer to the camcorder and a “Fail USB Connecting” message will appear. You must touch the “Switch Mode” tab → “PictBridge” tab on the screen, and the “Connecting as Printer Mode” message will appear.
- In some instances the HD camcorder may not connect to the printer. If connection fails, disconnect the USB cable and turn off the printer and back on. Then, connect the USB cable and set the HD camcorder to “PictBridge.”
- The date/time option may not be supported by all printers. Check with your printer manufacturer. The “Date/Time” menu cannot be set up if the printer does not support this option.
- PictBridge™ is a registered trademark of CIPA (Camera & Imaging Products Association), an image transfer standard developed by Canon, Fuji, HP, Olympus, Seiko Epson, and Sony.
- Use the USB cable provided with the HD camcorder.
- Use the AC power adaptor for your HD camcorder during PictBridge direct printing. Turning your HD camcorder off during printing might damage data on the storage media.
- Movie images are not available for printing.
- You can set various printing options depending on the printer. Please refer to the user manual of the printer for details.
- Do not remove USB cable or memory card during printing.
- You may not print photo images recorded on other devices.

打印照片图像

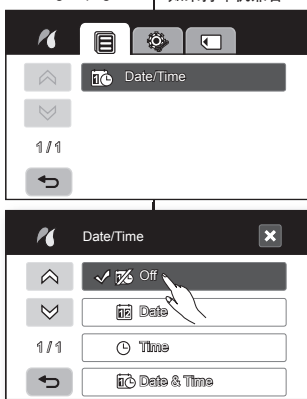
PictBridge菜单

设置印于照片上的日期/时间

触摸菜单导航(☰) → “Date/Time”(日期/时间) → “Off”(关闭) “Date”(日期) “Time”(时间), 或 “Date & Time”(日期和时间) → 返回导航(↩)。

使用DPOF设置打印

如果打印机兼容DPOF, 您可以使用DPOF设置。 → 第82页



- 如果打印机不被认可, 或使用 PictBridge 打印机直接打印之后再次打印, 请拔掉USB数据线, 在菜单内再次选择“PictBridge”然后再连接USB数据线。
- 如果将“USB Connect”(USB连接)菜单设置为“Mass Storage”(海量存储), 则您不能与 PictBridge 兼容的打印机连接到摄像机, 并且将显示“Fail USB Connecting”(USB连接失败)消息。必须触摸屏幕上的“Switch Mode”(切换模式) 导航 → “PictBridge” 导航, 就会显示 “Connecting as Printer Mode”(以打印机模式连接)消息。
- 在某些情况下, 高清数码摄像机可能不能连接到打印机。如果连接失败, 则拔掉USB线, 关闭打印机, 然后重新打开打印机。然后, 将高清数码摄像机设置为“PictBridge”后连接USB数据线。
- 并非所有的打印机都支持日期/时间打印。请查看您的打印机使用说明书。如果打印机不支持此功能, 则“Date/Time”(日期/时间)菜单不能设置。
- PictBridge™是CIPA (Camera & Imaging Products Association), 公司的注册商标, 照片传输标准是由Canon, Fuji, HP, Olympus, Seiko Epson和Sony所发展的。
- 使用高清数码摄像机随附的USB数据线。
- 在PictBridge直接打印期间, 请在您的高清数码摄像机上使用交流电源适配器。打印期间关闭高清数码摄像机电源可能会损坏存储卡上的数据。
- 不能够打印影音图像。
- 依照打印机的不同, 您可以有其他的打印功能。请参考打印机的操作说明。
- 在打印期间不要拔掉USB数据线或取出存储卡。
- 在其他设备上拍摄的照片图像不能通过本高清数码摄像机打印。

connecting to a PC

This chapter explains how to connect the camcorder to a PC using the USB cable for various functions.

❗ When connecting a USB cable to a PC, refer to the software installation instructions and PC specifications below.

SYSTEM REQUIREMENTS

CyberLink DVD Suite

Following requirements must be satisfied to use CyberLink DVD Suite.

OS	Windows Vista or XP (Windows XP Service Pack 2)
CPU	Intel® Pentium® 4, 3.2 GHz / AMD Athlon 64FX, 2.6GHz recommended
RAM	512 MB (1 GB and above recommended)
USB	USB2.0
Display	1024 x 768, 16-bit color or higher
Miscellaneous	Internet Explorer 5.5 or later
Supported media	DVD-R/-RW, DVD+R/-RW, DVD-RAM, CD-R/RW For the compatible DVD/CD burners, refer to CyberLink web site: http://www.cyberlink.com/english/products/powerproducer/4/comp_dvd_drive.jsp
Video card	nVIDIA Geforce 7600GT or higher ATI X1600 series or higher



- DVD Suite is optimized for Intel Core 2 Duo processors and CPUs with MMX, SSE, SSE2, 3DNow!, and Intel HyperThreading technology.
- The system requirements information above is not a guarantee that the provided software will work on all personal computers meeting those requirements.
- If you have a Unified Codec previously installed on your PC, this may cause an error from CyberLink DVD Suite. Please remove the existing Codec before proceeding with the installation of the suite.
- If you experience corrupted screen or abnormal color display, you must update the existing video driver to the latest. You can download the latest driver for your monitor from the applicable maker's customer service web page.

连接到电脑

本章节为您介绍怎样使用USB数据线将高清数码摄像机连接至电脑实现各种功能。

❗ 连接USB数据线至电脑，请参见软件安装指南以及如下电脑规格。

系统要求

CyberLink DVD Suite

使用 CyberLink DVD Suite 必须满足下列要求。

OS	Windows Vista 或 XP (Windows XP Service Pack 2)
CPU	推荐 Intel® Pentium® 4, 3.2 GHz / AMD Athlon 64FX, 2.6GHz
RAM	512 MB (推荐 1 GB 或更大的内存)
USB	USB 2.0
显示	1024 x 768, 16 位颜色或更高
其他	Internet Explorer 5.5 或更高版本
支持的介质	DVD-R/-RW, DVD+R/-RW, DVD-RAM, CD-R/RW 兼容 DVD/CD 烧结, 参见 CyberLink 网站: http://www.cyberlink.com/english/products/powerproducer/4/comp_dvd_drive.jsp
视频卡	nVIDIA Geforce 7600GT 或更高 ATI X1600 系列或更高



- DVD Suite是誉为完美的Intel Core 2 Duo处理器和MMX, SSE, SSE2, 3DNow! CPUs和Intel HyperThreading 技术。
- 不能保证所有满足以上系统要求信息的软件会在所有符合这些要求的个人电脑上正常工作。
- 如果您的电脑以前安装过Unified Codec (统一的编解码器), 可能会导致Cyberlink DVD Suite出现错误。请在继续安装本软件之前删除现有的Codec (编解码器)。
- 如果屏幕上的画面损坏或颜色失真, 请您将当前的视频驱动程序更新为最新版本。您可以到制造商的客服网页中下载最新的显示器驱动程序。

connecting to a PC

INSTALLING THE CyberLink DVD Suite

DVD Suite is software for easily editing MPEG, AVI, and other video files, still images, and other contents for creating a movie.

Before you begin:

Quit any other software you are using. (Check that there are no other application icons on the status bar.)

1. Load the provided CD-ROM into the PC.
 - Set up screen appears within several seconds. If the set up screen does not appear, doubleclick the CD-ROM icon in the "My Computer" window.
 - Click "Install Now."

2. Select the desired language and click "OK"

3. "CyberLink DVD suite install Shield Wizard" screen appears.

- Click "Next".

4. "License Agreement" screen appears.

- Click "Yes".

连接到电脑

安装CYBERLINK DVD SUITE

DVD Suite是一款可以让您更容易地编辑MPEG, AVI, 和其它视频文件, 静态图像以及创建其它内容影音的软件。

开始之前:

退出您正在实用的其它软件。(检查是否有其他应用图标在任务栏)

1. 将提供的CD-ROM放入电脑。

- 几秒钟后屏幕上显示设置画面。如果没有显示设置画面, 请双击“我的电脑”窗口中的CD-ROM图像。
- 点击“Install Now”。

2. 选择所需的语言, 然后单击 "OK"

3. "CyberLink DVD suite install Shield Wizard"屏幕将出现。

- 单击 "Next"

4. "License Agreement"屏幕将出现。

- 单击 "Yes"



5. "Customer Information" screen appears.

- Click "Next."

6. "Choose Destination Location" screen appears.

- Choose the destination location which you want to install.
- Click "Next."

7. "Setup status" screen appears.

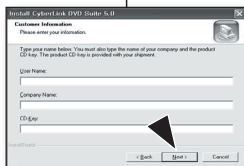
- The installation progresses in order as follows "Power Starter" → "Power DVD" → "Power Director" → "Menus" → "Power Producer" → "Power Producer Template."
- Wait for a moment until the installation is finished and "Setup Complete" screen appears.

8. "Setup Complete" appears.

- Click "Finish."
- The icon of "CyberLink DVD Suite" is created on the desktop.



- If you perform installation of software that is already installed, uninstallation will start. In this case, perform the installation again after uninstallation is finished.
- This manual only refers to software installation and PC connection. For more details on software, refer to the "Online help/Read me" on the CyberLink DVD Suite CD.
- Frame drop may occur in preview screen while you are using Power Producer. However, this does not affect any burned image on DVD title.

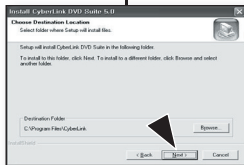


5. "Customer Information"屏幕将出现。

- 单击"Next"

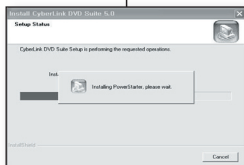
6. "Choose Destination Location"屏幕将出现。

- 选择想要安装的目标位置。
- 单击"Next"



7. "Setup status"屏幕将出现。

- 安装进度按如下所示顺序进行: "Power Starter" → "Power DVD" → "Power Director" → "Menus" → "Power Producer" → "Power Producer Template"。
- 等待一小会,直到安装完成, "Setup Complete"屏幕出现。



8. "Setup Complete"出现。

- 单击"Finish"。
- 将在桌面上创建"CyberLink DVD Suite"的图标。



- 如果您已经进行软件安装,则会开始卸载。在这种情况下,在卸载完成后才会开始再一次安装本软件。
- 本手册只包括软件安装和计算机连接。有关软件s的详细信息,请参阅 CyberLink DVD Suite CD 上的"Online help/Read me"。
- 使用 Power Producer 时在预览屏幕中可能会出现丢帧现象。但是,这不影响 DVD 上烧录的任何图像。



connecting to a PC

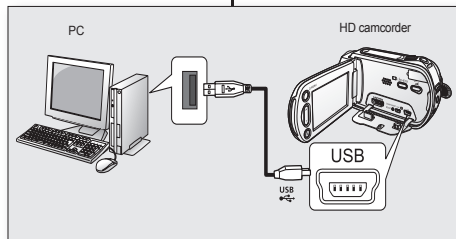
CONNECTING THE USB CABLE

To copy the movie files and photo files to your PC, connect your HD camcorder to the PC with a USB cable.

1. Set the **"USB Connect"** to **"Mass Storage."**
→ page 70
2. Connect the HD camcorder to the PC with a USB cable.



- Don't apply excessive force when inserting or extracting a USB cable into/from a USB jack.
- Insert a USB after checking the direction of its insertion is correct.
- Use the provided USB cable.



Disconnecting the USB cable

First disconnect the USB cable and turn off the HD camcorder. After completing the data transmission, you must disconnect the cable in the following way:

1. Click the "Unplug or eject hardware" icon on the task tray.
2. Select "USB Mass Storage Device" or "USB Disk," and then click "Stop."
3. Click "OK."
4. Disconnect the USB cable from the HD camcorder and PC.



- We recommend using the AC power adaptor as the power supply instead of the battery pack.
- When the USB cable is connected, turning the camcorder on or off the camcorder may cause the PC to malfunction.
- If you disconnect the USB cable from the PC or the HD camcorder while transferring, the data transmission will stop and the data may be damaged.
- If you connect the USB cable to a PC via a USB HUB or simultaneously connect the USB cable along with other USB devices, the HD camcorder may not work properly. If this occurs, remove all USB devices from the PC and reconnect the HD camcorder.

连接到电脑

连接USB数据线

通过USB数据线连接您的高清数码摄像机至电脑，复制影音文件和照片文件。

1. 设置**"USB Connect"**(USB连接)到**"Mass Storage"**(海量存储)
→第70页
2. 通过USB数据线将高清数码摄像机连接至电脑。



- 在插入或拔出USB端子的时候不要用力过猛。
- 请在插入USB端子之前检查插入的方向是否正确。
- 请使用厂家提供的USB数据线。

断开USB数据线

先拔掉 USB 线，再关闭高清数码摄像机。
在完成传输数据之后，您必须按照以下方法断开USB数据线：

1. 点击任务栏上“安全删除硬件”图标。
2. 选择“USB Mass Storage Device”或“USB Disk”，然后点击“停止”。
3. 点击“确定”
4. 断开高清数码摄像机与电脑的连接。



- 建议您使用交流电源适配器代替电池组为数码摄像机供电。
- 当USB数据线连接，开启或关闭高清数码摄像机会导致电脑故障。
- 如果在转移数据的过程中从高清数码摄像机或者电脑上断开USB数据线，数据传输将会停止并且数据可能损坏。
- 如果您通过USB HUB将USB数据线跟电脑相连或者同时连接其他的USB设备，数码摄像机可能不会正常工作。如果发生这种情况，请您从电脑上拔下USB设备，重新连接高清数码摄像机。

VIEWING THE CONTENTS OF STORAGE MEDIA

- Slide the **POWER** switch downward to turn the HD camcorder on.
 - Set the **"USB Connect"** to **"Mass Storage."** → page 70 (It is set to **"Mass Storage"** by default when you purchase the HD camcorder.)
 - Set the appropriate storage media. (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only) → page 26 (If you want to record on a memory card, insert the memory card.)
- Connect the HD camcorder to the PC with a USB cable. → page 88
 - The "Removable Disk" window appears on the PC's screen after a moment.
 - Two removable disks appear when connecting a USB. (SC-HMX10A/HMX10C/HMX10CN/HMX10ED only).
The built-in memory is the first recognized drive of two removable discs newly registered in the 'My Computer'. For example, when (F:) drive and (G:) drive are recognized in the PC, (F:) drive and (G:) drive are the built-in memory and memory card, respectively.
You can select the desired memory type.
 - Select "Open folders to view files using Windows Explorer" and click "OK."
- The folders in the storage media appear.
 - Different file types are stored in different folders.



- If the "Removable Disk" window does not appear, confirm the connection (page 88) or perform the steps 1 and 2.
- When the removable disk does not appear automatically, open the removable disk folder of My Computer.

查看存储介质信息

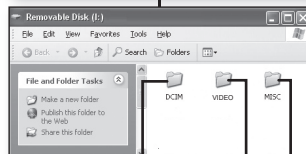
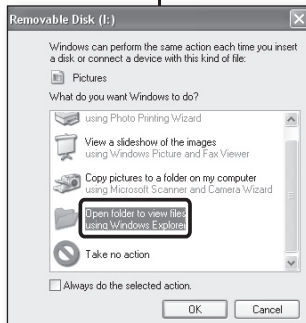


Photo images

Movie image

setting data

- 将 **POWER** 开关向下滑动以打开 高清数码摄像机。
 - 将 **"USB Connect"**(USB连接)设置为 **"Mass Storage"**(海量存储)。→第70页 (默认情况下, 购买高清数码摄像机时它就被设置为 **"Mass Storage"**(海量存储)。)
 - 设置适当的存储介质。
(仅适用于SC-HMX10A/HMX10C/HMX10CN/HMX10ED) →第26页 (如果要在存储卡上进行录制, 则插入存储卡。)
- 通过USB数据线连接高清数码摄像机至电脑。→第88页
 - 过一小会儿之后电脑屏幕上显示“可移动磁盘”。
 - 连接 USB 时将出现两个可移动磁盘。
(仅适用于 SC-HMX10A/HMX10C/HMX10CN/HMX10ED)。 内置存储器是在“我的电脑”中新登记的两个可移动磁盘先识别的驱动器。例如, 若在计算机中识别 (F:) 盘和 (G:) 盘, 则 (F:) 盘和 (G:) 盘分别是内置存储器和存储卡。
您可以选择所需的存储器类型。
 - 选择“通过Windows Explorer 浏览器打开并查看文件夹”并且点击“确定”。
- 显示存储介质中的文件夹。
 - 不同的文件存储在不同类型的文件夹内。
 - 如果未显示“可移动磁盘”窗口, 请确认第1, 2步骤得连接和执行操作 (第88页)。
 - 如果可移动磁盘没有自动显示, 则从“我的电脑”打开可移动磁盘文件夹。



connecting to a PC

Structure of folders and files on the storage media

- The folder and file structure for storage media is as follows:
- Don't arbitrarily change or remove the folder or file name. It may not be playable.
- The file naming follows DCF (Design rule for Camera File System).

Image configuration file ❶

This is where data for photo files such as DPOF is stored.

Movie image file (H.264) ❷

The HD-quality movie images have HDV_####.MP4 format and the SD-quality movie images have SDV_####.MP4 format. The file number automatically increases when a new movie image file is created. Up to 999 files are created in one folder. New folder is created when more than 999 files are created.

For example: If the size of one recording is over 2GB (more than 22 minutes in HD Super Finemode) file HDV_0001.MP4 is closed, and the file, HD010001.MP4 is created.

Photo image file ❸

As in movie image files, the file number automatically increases when a new image file is created. The maximum file number allowed is the same as in movie image files. A new folder stores files from CAM_0001.JPG. The folder name increases in the order of 100PHOTO → 101PHOTO etc.

Up to 999 files are created in one folder. New folder is created when more than 999 files are created.

连接到电脑

存储介质上的文件夹和文件的结构

- 存储介质上的文件夹和文件结构如下所示:
- 不要任意移动或者更改文件夹或者文件名称。这样做很可能导致文件不能正常播放。
- 文件名由DCF (相机文件系统的设计规则)规定。

图像配置文件 ❶

这是存放照片文件譬如DPOF文件的地方。

影音图像文件(H.264) ❷

HD质量影音图像有HDV_####.MP4格式, SD质量影音图像有SDV_####.MP4格式。当录制了一个新的影音文件, 会自动增加一个文件编号。一个文件夹最多可以创建999个文件, 当文件超过了999个就要新建一个新的文件夹。

例如: 如果一个录制内容的大小超过 2GB (在 HD 高清晰模式下超过 22 分钟), 则会关闭文件 HDV_0001.MP4, 并创建文件 HD010001.MP4。

照片图像文件 ❸

如同影音图像文件一样, 当创建一个新的图像文件时便会自动增加一个文件编号。与影音图像文件允许的最多文件数量是相同的。一个新的文件夹存放文件从CAM_0001.JPG开始。文件夹名称按照100PHOTO → 101PHOTO.....的顺序创建。

一个文件夹内可以创建999个文件。当文件超过999时, 便会创建一个新的文件夹。

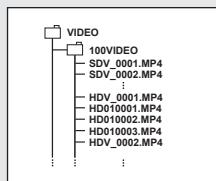
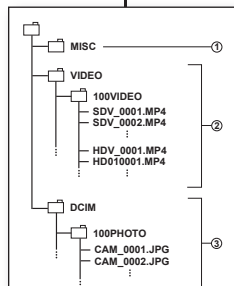


Image format

Movie image

- Movie images are compressed in H.264 format. The file extension is **“.MP4.”**
- The image size is 1280x720 (HD) or 720x480 (SD). ➞page 60

Photo image

- Photo images are compressed in JPEG (Joint Photographic Experts Group) format. The file extension is **“.JPG.”**
- The image size is 2048x1536, 1440x1080, or 640x480. ➞page 63



- When the 999th file is created in the 999th folder (i.e. HDV_0999.MP4 is created in the 999VIDEO folder), a new folder cannot be created anymore. Set **“File No.”** to **“Reset”** at this time.
- You may modify the name of a file/folder stored in the storage media using a PC. This HD camcorder may not recognise modified files.

TRANSFERRING FILES FROM THE HD CAMCORDER TO YOUR PC

You can copy the movie and photo images to your PC and play them back.

- Execute the procedure in “Viewing the contents of storage media.” ➞page 89
 - The folders in the storage media appear.
- Create a new folder, enter the folder name, then doubleclick it.
- Select the folder to copy, then drag and drop it into the destination folder.
 - The folder is copied from the storage media (memory card (all models) or built-in memory (SC-HMX10A/HMX10C/HMX10CN/HMX10ED)) to the PC.



To playback the movie image copied to PC
Use the provided software to playback the movie images in the PC. The movie images recorded on your HD camcorder may not be played back in other software.

图像格式

影音图像

- 影音文件的压缩格式为H.264。文件的扩展名为**“.MP4.”**。
- 图像文件的大小是 1280x720 (HD)或720x480 (SD)。 ➞第60页

照片图像

- 照片图像的压缩格式为JPEG (摄影专业人员联合组织)。文件的扩展名为**“.JPG.”**。
- 图像文件大小是2048x1536, 1440x1080,或640x480。 ➞第63页



- 当第999个文件被创建在第999个文件夹时(例如 HDV_0999.MP4被创建在 999VIDEO文件夹),则无法再创建一个新的文件夹。这个时候, 请设置 **“File No.”(文件编号)**到**“Reset”(重置)**。
- 您可以通过电脑修改存储卡中的文件/文件夹名称。但是本高清数码相机可能无法识别修改后的文件。

从高清数码相机转移文件至电脑

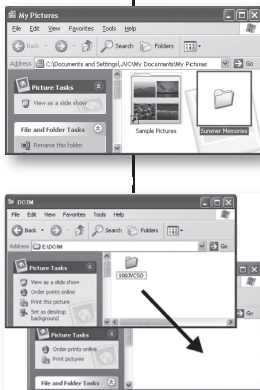
您可以复制影音图像至电脑并且进行播放。

- 执行“查看存储介质内容”程序。 ➞第89页
 - 显示存储介质内的文件夹。
- 创建一个新的文件夹, 输入文件夹名称, 然后双击它。
- 选择要复制的文件夹, 然后将它拖放到目的地文件夹
 - 复制存储介质中的文件夹到(存储卡(所有型号)或者内置存储器(SC-HMX10A/HMX10C/HMX10CN/HMX10ED))电脑。



播放复制到计算机的影音图像

使用提供的软件通过电脑播放影音图像。使用其它软件不能播放通过本高清数码相机录制的影音图像。



maintenance & additional information

MAINTENANCE

Your HD camcorder is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you fulfill any warranty obligations and allow you to enjoy this product for many years.

- For safekeeping of the HD camcorder, turn off the HD camcorder.
 - Remove the battery pack and AC power adaptor. ➔ page 13,16
 - Remove the memory card. ➔ page 27

Cautions when storing

- Do not leave the HD camcorder in a place where the temperature is very high for a long period of time: The temperature inside a closed vehicle or trunk can become very high in a hot season. If you leave the HD camcorder in such a place, it could malfunction or the case could be damaged. Do not expose the HD camcorder to direct sunlight or place it near a heater.
- Do not store the HD camcorder in a place where the humidity is high or in a dusty place: Dust entering the HD camcorder could cause malfunctions. If humidity is high, the lens could become moldy, and the HD camcorder could become inoperative. It is recommended that you put the HD camcorder in a box together with a small silica bag when storing it in a closet, etc.
- Do not store the HD camcorder in a place subject to strong magnetism or intense vibration: This could cause malfunctions.
- Detach the battery pack from the HD camcorder and store it in a cool place: Leaving the battery pack attached or storing it at high temperature could shorten its life.

Cleaning the HD camcorder

Before cleaning, turn off the HD camcorder and remove the battery pack and AC power adaptor.

- To clean the exterior
 - Wipe gently with a soft dry cloth. Do not apply excessive force when cleaning, gently rub the surface.
 - Do not use benzene or thinner to clean the camcorder. The coating of exterior could peel off or the case could deteriorate.
- To clean the LCD screen
 - Wipe gently with a soft dry cloth. Be careful not to damage the monitor.
- To clean the lens
 - Use an optional air blower to blow out dirt and other small objects. Do not wipe the lens with cloth or your fingers. If necessary, wipe gently with lens cleaning paper.
 - Mold may form if the lens is left dirty.
 - If the lens looks dimmer, turn off the HD camcorder and leave it for about 1 hour.

维护及其他信息

维护

您的高清数码摄像机是具有超级设计和工艺的产品，应该小心对待。下面的建议将帮助履行所有担保义务，并让您多年使用本产品。

- 为了保护高清数码摄像机，要关闭高清数码摄像机。
 - 卸下电池组和交流电源适配器。➔第13,16页
 - 取出存储卡。➔第27页

有关保存的注意事项

- 切勿将高清数码摄像机放在温度过高的地方很长时间：封闭的车辆或卡车在炎热的季节会变得很热。如果您将高清数码摄像机留在此类地方，可能会出现故障或损坏外壳。切勿将高清数码摄像机直接暴露在阳光下或放在靠近热源的地方。
- 切勿将高清数码摄像机存放在湿度很高的地方：灰尘进入高清数码摄像机可能会导致故障。如果湿度很高，镜头会发霉，而高清数码摄像机可能会导致不能正常工作。将高清数码摄像机存放在壁橱中时，建议您将其与干燥剂一起放入盒子中。
- 切勿将高清数码摄像机保存在磁性很强或强烈震动的地方：这可能导致故障。
- 从高清数码摄像机卸下电池组，并将其存放在阴凉得地方：将连接的电池组存放在温度很高的地方可能会缩短其寿命。

清洁高清数码摄像机

在清洁之前，关闭高清数码摄像机，然后卸下电池组和交流电源适配器。

- 清洁外部
 - 用柔软的干布轻轻擦拭。清洁时请勿过度用力，轻轻擦拭表面即可。
 - 切勿使用苯或稀释剂清洁摄像机。外层会脱落或外壳会被损坏。
- 清洁LCD显示屏
 - 用柔软的干布轻轻擦拭，注意不要损坏显示屏。
- 清洁镜头
 - 使用可选购的吹风机将灰尘和其它小物体吹走。切勿用布或手指擦拭镜头。如果必要，使用镜头清洁纸轻轻擦拭。
 - 如果镜头很脏，可能会发霉。
 - 如果镜头看起来较暗，请关闭高清数码摄像机1小时左右。

ADDITIONAL INFORMATION

Storage media

- **Be sure to follow the guidelines below to prevent corruption or damage to your recorded data.**
 - Do not bend or drop the storage media, or subject it to strong pressure, jolts or vibrations.
 - Do not splash the storage media with water.
 - Do not use, replace, or store the storage media in locations that are exposed to strong static electricity or electrical noise.
 - Do not turn off the camcorder power or remove the battery or AC power adaptor during recording, playback, or when otherwise accessing the storage media.
 - Do not bring the storage media near objects that have a strong magnetic field or that emit strong electromagnetic waves.
 - Do not store the storage media in locations with high temperature or high humidity.
 - Do not touch the metal parts.
- **Copy the recorded files to your PC. Samsung shall not be responsible for any lost data. (It is recommended that you copy the data from your PC to other media for storage.)**
- **A malfunction may cause the storage media to fail to operate properly. Samsung will not provide any compensation for any lost contents.**
- **Refer to pages 26-30 for details.**

LCD screen

- **To prevent damage to the LCD screen**
 - Do not push it too hard or knock it on anything.
 - Do not place the camcorder with LCD screen on the bottom.
- **To prolong service life, avoid rubbing it with a coarse cloth.**
- **Be aware of the following phenomena for LCD screen use. They are not malfunctions.**
 - While using the camcorder, the surface around the LCD screen may heat up.
 - If you leave power on for a long time, the surface around the LCD screen becomes hot.

Battery packs

The supplied battery pack is a lithium-ion battery. Before using the supplied battery pack or an optional battery pack, be sure to read the following cautions:

- **To avoid hazards**
 - Do not burn.
 - Do not short-circuit the terminals. When transporting, carry the battery in a plastic bag.
 - Do not modify or disassemble.
 - Do not expose the battery to temperatures exceeding 60°C (140°F), as this may cause the battery to overheat, explode or catch fire.

其他信息

存储介质

- **请务必遵守如下指导，以免您记录的数据造成不必要的损失。**
 - 不要弯折或掉落存储介质，或对其实施压力、颠簸或震动。
 - 不要让存储介质上溅上水。
 - 不要在强静电或强电子干扰的地方使用，更换，或存放存储介质。
 - 在录制，播放或访问存储介质期间关掉摄像机电源或取出电池组或拔掉交流电源适配器。
 - 不要将存储介质暴露于强磁场或强电磁波的地方附近。
 - 不要将存储介质放在高温或高湿的地方。
 - 不要触摸存储介质的金属部分。
- **将录制的文件复制到您的电脑，三星公司不会对丢失数据负任何责任。(建议您将数据从电脑复制到其它存储介质进行保存。)**
- **发生故障之后可能导致存储介质不能正常操作使用。三星公司不会对丢失数据承担任何赔偿。**
- **详细内容请参见第26-30页。**

LCD显示屏

- **预防LCD显示屏被损坏**
 - 不要用力推挤或者敲打数码相机
 - 不要将LCD显示屏朝下放置数码相机。
- **不要使用粗糙的布料擦拭显示屏，以延长产品的使用期限。**
- **在使用LCD显示屏的时候出现以下现象，不是发生故障。**
 - 在使用摄像机期间，LCD显示屏周围会发热。
 - 当长时间开启电源的时候，LCD显示屏的周围会发热。

电池组

提供的电池组是锂离子电池组。在使用提供的电池组或其它任何电池组之前，请仔细阅读以下警告事项：

- **避免危险**
 - 不要火烧。
 - 不要短路终端。请将电池组装在一个塑料袋内进行运输。
 - 不要自行修理或拆卸。
 - 不要将电池组暴露于温度超出60°C (140°F)的地方，这样也许会导致电池组过热，爆炸或起火。

maintenance & additional information

- To prevent damage and prolong service life
 - Do not subject to unnecessary shock.
 - Charge in an environment where temperatures are within the tolerances shown below.
This is a chemical reaction type battery - cooler temperatures impede chemical reaction, while warmer temperatures can prevent complete charging.
 - Store in a cool, dry place. Extended exposure to high temperatures will increase natural discharge and shorten service life.
 - Fully charge the battery pack at least every 6 months when storing the battery pack over a long period of time.
 - Remove from charger or powered unit when not in use, as some machines use current even when switched off.



- It is recommended that only genuine **Samsung** batteries are used in this camcorder. Using generic non-**Samsung** batteries can cause damage to the internal charging circuitry.
- It is normal for the battery pack to be warm after charging, or after use.

Temperature range specifications

Charging: 10°C to 35°C (50°F to 95°F)

Operation: 0°C to 40°C (32°F to 104°F)

Storage: -20°C to 60°C (-4°F to 132°F)

- The lower the temperature, the longer recharging takes.
- Refer to pages 15-16 for detail.

On charging the built-in rechargeable battery

Your camcorder has a pre-installed rechargeable battery to retain the date, time, and other settings even when the power switch is set to off. The pre-installed rechargeable battery is always charged while your camcorder is connected to the wall outlet via the AC power adaptor or while the battery pack is attached. The rechargeable battery will be fully discharged in about 6 months if you do not use your camcorder at all. Use your camcorder after charging the pre-installed rechargeable battery. However, even if the pre-installed rechargeable battery is not charged, the camcorder operation will not be affected as long as you are not recording the date.

维护&其他信息

- 防止损伤和延长产品使用期限
 - 不要过度震动产品。
 - 充电的过程要在如下列出的温度范围内进行。
本电池组是一种化学反应类型的电池-较低的温度会妨碍化学反应-较高的温度也许造成电池组不能够完全充满电。
 - 保存在一个凉爽、干燥的地方。长期暴露于高温下会增加电池组的放电量并且缩短产品使用寿命。
 - 如果长时间不使用电池组，建议您每6个月将电池组拿出来充满电一次。
 - 请在不使用的时候拔掉充电器或电源，同样要在关闭电源的时候与其它一些设备连接。



- 建议您仅使用**三星**原装电池组。使用普通非**三星**原装电池组可能会损坏电路板。
- 在充电后或使用后电池组发热，这是正常现象。
温度范围规格
充电: 10°C 到 35°C (50°F 到 95°F)
操作: 0°C 到 40°C (32°F 到 104°F)
保存: -20°C 到 60°C (-4°F 到 132°F)
- 较低的温度环境需要较长的时间进行充电。
- 详情请参见第15-16页。

为内置蓄电池充电

您的摄像机事先配有可再充电电池以备在关闭电源的时候保留日期，时间以及其它一些设置。事先配有的可再充电电池当摄像机通过交流电源适配器连接到壁装电源插座或安装了电池组的过程中，会被动充电。如果您大约6个月未使用本数码摄像机，可再充电电池的电量也许被耗尽。请将配有的可再充电电池组进行充电后，再使用您的数码摄像机。然而，即使事先配有的可再充电电池没有电量，只要您不需要记录日期那么摄像机的操作便不会受到影响。

USING YOUR HD CAMCORDER ABROAD

- Each country or region has its own electric and color systems.
- Before using your HD camcorder abroad, check the following items.
- **Power sources**
The provided AC adaptor features automatic voltage selection in the AC range from 100 V to 240 V. You can use your camcorder in any countries/regions using the AC power adaptor supplied with your camcorder within the AC 100 V to 240 V, 50/60 Hz range. Use a commercially available AC plug adaptor, if necessary, depending on the design of the wall outlet.
- **Viewing images recorded with HD (high definition) image quality**
In countries/regions where 720/60p is supported, you can view the images with the same HD (high definition) image quality as that of the recorded images. You need an NTSC-system-based and 720/60p compatible TV (or monitor) with HDMI cable and component cable must be connected.
- **Viewing images recorded with SD (standard definition) image quality**
To view images recorded with SD (standard definition) image quality, you need an NTSC-system-based TV with Audio/Video input jacks. A component cable or Multi-AV cable connected.
- **On TV color systems**
Your camcorder is an NTSC-system-based camcorder. If you want to view your recordings on a TV or to copy it to an external device, it must be an NTSC-system-based TV or an external device and have the appropriate Audio/Video jacks. Otherwise, you may need to use a separate video format transcoder (NTSC-PAL format converter).

NTSC-compatible countries/regions

Bahamas, Canada, Central America, Japan, Korea, Mexico, Philippines, Taiwan, United States of America, etc.

PAL-compatible countries/regions

Australia, Austria, Belgium, Bulgaria, China, CIS, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Great Britain, Holland, Hong Kong, Hungary, India, Iran, Iraq, Kuwait, Libya, Malaysia, Mauritius, Norway, Romania, Saudi Arabia, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Syria, Thailand, Tunisia, etc.



You can make recordings with your HD camcorder and view pictures on the LCD screen from anywhere in the world.

在国外使用高清数码摄像机

- 每个国家或地区都有自己的电源和彩色系统。
- 在国外使用数码摄像机之前，请检查一下各项。
- **电源**
提供的交流电源适配器具有从110伏到240伏之间进行自动选择电压的功能。
透过在交流电100伏到240伏、50/60 赫兹范围内使用摄像机随附的交流电源适配器，您可以在任何国家/地区使用摄像机。根据墙上插座设计，如有必要，请使用市面上提供的交流电源适配器。
- **查看以HD（高清晰度）质量录制的图像**
在720/60P支持的国家/地区，您可以查看以相同HD(高清晰度)质量录制的图像。您需要通过HDMI电缆和分量电缆与基于NTSC系统并且兼容720/60P的电视(或显示器)连接。
- **查看以SD(标准清晰度)质量录制的图像**
查看以SD(标准清晰度)质量录制的图像，您需要基于NTSC系统的电视和音频/视频输入接口。并且连接分量电缆或者Multi-AV电缆。
- **关于电视彩色系统**
您的摄像机是基于NTSC系统的摄像机。如果您想在电视上查看录制内容或将其复制到外部设备，必须使用基于NTSC系统的电视或具有适当音频/视频插孔的外部设备。否则，您可能需要使用单独购买的视频格式转码器（NTSC-PAL格式转换器）。

NTSC制式国家和地区包括：

巴哈马群岛，加拿大，中美洲，日本，墨西哥，菲律宾共和国，韩国，台湾，美国，等等。

PAL制式国家和地区包括

澳大利亚，奥地利，比利时，保加利亚，中国，独联体，捷克，丹麦，埃及，芬兰，法国，德国，希腊，英格兰，荷兰，香港，匈牙利，印度，爱尔兰，伊拉克，科威特，利比亚，马来群岛，毛里求斯，挪威，罗马尼亚，沙特阿拉伯，新加坡，斯洛伐克，西班牙，瑞典，瑞士，叙利亚，泰国，突尼斯，等等。



您可以在世界各地通过本高清数码摄像机的LCD显示屏进行录制和播放图像。

troubleshooting

TROUBLESHOOTING

Before contacting a Samsung authorised service center, perform the following simple checks. They may save you the time and expense of an unnecessary call.

Warning indicators and messages

Battery pack

Message	Icon	Informs that...	Action
Low Battery	-	The battery pack is almost discharged.	Replace with a charged battery or connect the AC power adaptor.
Low Battery Connect AC adaptor and try again	-	Delete, Copy and Move functions are inoperable due to the exhausted battery.	Replace with a charged battery or connect the AC power adaptor.
Check the authenticity of this battery	-	The battery pack cannot pass authenticity check.	Check the battery's authenticity and change to new one.

Storage media

Message	Icon	Informs that...	Action
Memory full! *		There is not enough space to record on built-in memory.	- Delete unnecessary files on the built-in memory. - Back-up files to PC or another storage media and delete files. - Use a memory card.
Insert card		There is no memory card inserted in the memory card slot.	- Insert a memory card. - Use the built-in memory. *
Card Full!		There is not enough space to record on memory card.	- Delete unnecessary files on the memory card. - Back-up files to PC or another storage media and delete files. - Use the built-in memory. * - Change memory card to another one has enough free space.

*: SC-HMX10A/HMX10C/HMX10CN/HMX10ED only

故障处理

故障处理

在连三星授权维修中心前, 请进行如下简单的检查。

警告显示和信息

电源

信息	图标	说明内容……	处理
Low Battery (电池电量低)	-	电池组电量即将消耗殆尽。	更换一块新的电池组或使用交流电源适配器。
Low Battery Connect AC adapter and try again. (电池电量低, 请连接 AC 适配器并重试)	-	电池电量低, 不能进行删除、复制以及移动。	更换一块满电的电池组或连接交流电源适配器。
Check the authenticity of this battery. (检查此电池的可靠性)	-	该电池没有通过信赖性检查。	检查电池的信赖性并且更换一块新的电池组。

存储介质

信息	图标	说明内容……	处理
Memory Full! (存储卡已满!)*		内置存储器中没有足够的存储空间进行录制。	- 删除内置存储器中一些多余的文件。 - 将文件转移到电脑或者其它存储介质上然后删除存储器中的文件。 - 使用存储卡。
Insert Card (请插入卡)		存储卡没有插入存储卡插槽。	- 插入存储卡。 - 使用内置存储器。*
Card Full! (存储卡满!)		存储卡中没有足够的存储空间进行录制。	- 删除存储卡中一些多余的文件。 - 将文件转移到电脑或者其它存储介质上然后删除存储器中的文件。 - 使用内置存储器。* - 更换一张有足够存储空间的存储卡。

*: 仅限 SC-HMX10A/HMX10C/HMX10CN/HMX10ED

Message	Icon	Informs that...	Action
Card Locked		The write protection tab on SD or SDHC card has been set to lock.	Release the write-protection tab.
Card Error		The memory card has some problem and cannot be recognised.	Change memory card to another one.
Not Formatted		The memory card is not formatted.	Format the memory card using menu item.
Not Supported Format		The memory card may have been formatted by another device and may still have existing images on it.	- The image format is not supported. Check the supported file format. ➡ page 91 - Format the memory card using menu item.
Not Supported Card		The memory card is not supported in this camcorder.	Change the memory card with the one recommended.
Low Speed Card. Please record a Lower quality.	-	The memory card does not have enough performance to record.	- Record movie to a lower quality. - Change memory card to faster one. ➡ page 27

Recording

Message	Icon	Informs that...	Action
Open Lens Cover		Lens cover is closed.	Open the lens cover.
Write Error	-	Some problems occur during writing data to storage media.	Format storage media using the menu item after backing up important files to a PC or another storage media.
Release the EASY.Q	-	You cannot operate some functions manually when EASY.Q is activated.	Release EASY.Q function.
Recovering Data...	-	The file was not created normally.	- Wait until data recovery is finished. - Never turn off the power and eject memory card during recording.

信息	图标	说明内容……	处理
Card Locked (卡被锁定)		SD 或 SDHC 的写保护片设置为关闭。	打开写保护片。
Card Error (卡错误)		存储卡出现问题, 不能被识别。	更换另一个存储卡。
Not Formatted (没有格式化)		存储卡未被格式化。	通过菜单对存储卡进行格式化。
Not Supported Format (不支持此格式)		图像格式在此摄录机中不受支持。图像是在另一个设置中以另一种格式录制的。	图像格式不受支持。
Not Supported Card (卡不受支持)		本摄像机不支持该存储卡。	- 更换一张厂家推荐的存储卡。检查受支持的文件格式。➡第91页 - 使用菜单项格式化存储卡。
Low speed card. Please record a lower quality. (卡速度低。请以较低质量录制。)	-	存储卡的性能不足以进行录制。	- 以较低质量录制视频。 - 将存储卡更换为快一些的存储卡。➡第27页

录制

信息	图标	说明内容……	处理
Open Lens Cover (打开镜头盖)		镜头盖为关闭状态。	打开镜头盖。
Write Error (写入错误)	-	在写入数据到存储介质的时候出现问题。	将重要文件转移到电脑或其它存储设备上之后通过菜单选项格式化存储介质。
Release the EASY.Q (请退出 EASY.Q)	-	当使用 EASY.Q 的时候您不可以手动操作一些功能。	退出 EASY.Q 功能。
Recovering Data... (正在恢复数据...)	-	文件未正确创建。	- 等待数据恢复完毕。 - 不要在录制的过程中关闭电源以及取出存储卡。

troubleshooting

Message	Icon	Informs that...	Action
Activate remote control.		Remote function was set to off.	Set "Remote" function to "On."
Number of video files is full. Cannot record video.	-	Folder and file number reached to its limitation and you cannot record.	Set "File No." to "Reset."
Number of photo files is full. Cannot take a photo.	-	Folder and file number reached to its limitation and you cannot take a picture.	Set "File No." to "Reset."

Playback

Message	Icon	Informs that...	Action
Not enough free space in Memory. *	-	File editing functions cannot be performed because free space of built-in memory is not enough.	- Delete unnecessary files on the storage media. - Back-up files to PC or another storage media and delete files.
Not enough free space in Card.	-	File editing function cannot be performed because free space of memory card is not enough.	- Delete unnecessary files on the storage media. - Back-up files to PC or another storage media and delete files.
Different format	-	Combine function cannot be performed because two file formats are different from each other.	It is not possible to combine two files that have different recording format.
Read Error	-	Some problems occur during reading data from storage media.	Format storage media using the menu item after backing up important files to a PC or another storage device.

- *: SC-HMX10A/HMX10C/HMX10CN/HMX10ED only

故障处理

信息	图标	说明内容……	处理
Activate Remote Control (激活遥控器。)		遥控功能被设置为关闭。	设置"Remote"(遥控)功为"On"(打开)。
Number of video files is full. Cannot record video. (视频文件数已满。不能录制视频。)	-	文件夹和文件的编号已经达到极限不能继续录制。	设置"File No."(文件编号)到"Reset"(重置)。
Number of photo files is full. Cannot take a photo. (照片文件数已满。不能拍摄照片。)	-	文件夹和文件的编号已经达到极限不能继续拍摄。	设置设置"File No."(文件编号)到"Reset"(重置)。

播放

信息	图标	说明内容……	处理
Not enough free space in Memory. (内存中的可用空间不足。)	-	因为内置存储器的剩余空间不足，文件编辑功能无法执行。	- 删除存储介质上多余的文件。 - 将文件转移到电脑或者其它存储介质上然后删除存储介质中的文件。
Not enough free space in Card. (卡中的可用空间不足。)	-	因为存储卡的剩余空间不足，文件编辑功能无法执行。	- 删除存储介质上多余的文件。 - 将文件转移到电脑或者其它存储介质上然后删除存储卡中的文件。
Different Format (不同的格式)	-	两个文件的格式不相同无法执行组合功能。	两个录制格式不相同的文件无法进行合并。
Read Error (读取错误)	-	在从存储介质读取数据时出现问题。	将重要文件转移到电脑或其它存储介质后，通过菜单选项格式化存储介质。

- *: 仅限SC-HMX10A/HMX10C/HMX10CN/HMX10ED

USB

Message	Icon	Informs that...	Action
Fail Printer Connecting	-	A problem occurred when connecting the camcorder via USB to a printer.	- Check the USB cable. - Try again the connecting procedure as we instructed. - Switch "USB connect" function to "Mass Storage."
Fail USB Connecting	-	Some problems occur during connecting USB interface to PC.	- Check the USB cable. - Try again the connecting procedure as we instructed. - Switch "USB connect" function to "PictBridge."
Ink Error	-	There are some problems with ink cartridge.	- Check the ink cartridge. - Put the new ink cartridge.
Paper Error	-	There are some problems with the paper.	Check the paper in the printer. If there is no paper, insert the paper.
File Error	-	There are some problems with file.	- Your HD camcorder does not support this file format. - Try another file recorded on your HD camcorder
Printer Error	-	There are some problems with printer.	- Turn printer power off and on. - Contact printer manufacturer service center.
Print Error	-	Some problems occur during printing.	Do not remove power source or eject memory card during printing.



CAUTION

When there is dew condensation, put the camcorder aside for a while before using

- What is dew condensation?
Dew condensation happens when a HD camcorder is moved to a place where there is a significant temperature difference from the previous place. The Dew condenses on the external or internal lenses of the HD camcorder, and on the reflection lens. When this happens, it may cause a malfunction or damage to the HD camcorder when using the device with the power on while there is dew condensation.
- What can I do?
Turn the power off and detach the battery pack, and leave it in a dry area for 1~2 hours before using it.
- When does the dew condensation occur?
When the device is relocated to a place with a higher temperature than the previous location, or when using it in a hot area suddenly, it will cause condensation.
 - When recording outside in cold weather during the winter and then using it indoors.
 - When recording outside in hot weather after being indoors or inside a car where the A/C was running.

Note before sending your camcorder for repair.

- If these instructions do not solve your problem, contact your nearest Samsung authorised service center.
 - Depending on the problem, the built-in memory may need to be initialised or replaced and the data will be deleted. Be sure to back up the data on your PC before sending your camcorder for repair.
- Samsung cannot guarantee any loss of your data.

USB

信息	图标	说明内容.....	处理
Fail Printer Connecting (打印机连接失败)	-	连接 USB 至打印机时出现问题。	- 检查USB数据线。 - 按照书中的介绍尝试再次连接。 - 切换“USB Connect”(USB 连接)功能至“Mass Storage”(海量存储)
Fail USB Connecting (USB 连接失败)	-	连接 USB 至电脑时出现问题。	- 检查USB数据线。 - 按照书中的介绍尝试再次连接。 - 切换“USB Connect”(USB 连接)功能至“PictBridge”
Ink Error (墨水错误)	-	墨盒出现问题。	- 检查墨盒。 - 给墨盒注墨。
Paper Error (纸张错误)	-	纸张出现问题。	检查打印机纸张。如果没有放纸,请放入纸张。
File Error (文件错误)	-	文件出现问题。	- 您的高清数码摄像机不支持此文件格式。 - 试着使用您的高清数码摄像机再次录制。
Printer Error (打印机错误)	-	打印机出现问题。	- 将打印机关闭然后再打开。 - 联系打印机厂商的客服中心。
Print Error (打印错误)	-	在打印的过程中出现问题。	在打印的过程中不要拔掉电源或取出存储卡。



注意

当有露水凝结的时候, 请在使用前放置一段时间。

- 什么是露水凝结?
当数码摄像机从一个地方移动到另一个温度明显有差异的地方, 就会发生露水凝结现象。换句话说, 空气中的水蒸汽因为温度的差异转变成露水。并且在数码摄像机镜头的内部和反射镜头, 以及与播放相关的光盘表面上凝结成露水。当发生这种情况时, 数码摄像机的录制以及播放功能可能会暂时失灵。而且, 如果有露水凝结的现象时接通电源, 很可能导致数码摄像机失灵或者损坏。
- 怎样处理呢?
关闭电源并且卸下电池组, 在使用数码摄像机之前将其放置于干燥的地方 1~2 个小时。
- 何时会发生露水凝结?
当设备被重新放置回一个温度更高的地方, 或是突然在高温地区使用时, 会发生露水凝结。
 - 冬天, 在室外寒冷的天气中进行录制, 然后进入室内使用时。
 - 从开着空调的室内或者车内进行录制, 然后移动到炎热的室外时。
- 修理数码摄像机前的注意事项**
- 如果这些说明不能解决问题时, 请与最近的三星授权服务中心联系。
- 根据出现的问题, 当前的硬盘也许需要初始化或更换并且删除数据。请务必在数码摄像机送出修理之前, 将数据备份到硬盘或是其他存储介质上。三星公司不能保证不会弄丢您数据。

troubleshooting

- ❖ If these instructions do not solve your problem, contact your nearest Samsung authorised service center.

Symptoms and solutions

Power

Symptom	Explanation/Solution
The HD camcorder does not turn on.	- The battery pack may not be installed on your HD camcorder. Insert the battery pack in the HD camcorder. - The inserted battery pack may be discharged. Charge the battery pack or replace it with a charged one. - If you use AC power adaptor, make sure it is properly connected to wall outlet.
The power turns off automatically.	- Is "Auto Power Off" set to "5 min"? If no button is pressed for about 5 minutes, the HD camcorder is automatically turned off ("Auto Power Off"). To disable this option, change the setting of "Auto Power Off" to "Off." ➤ page 69 - The battery pack is almost exhausted. Charge the battery pack or replace it with a charged one.
Power cannot be turned off.	- Remove the battery pack or unplug AC power adaptor, and connect the power supply to the camcorder again before turning it on. - Press the RESET button, and connect the power supply to the camcorder again before turning it on. ➤ page 17
The battery pack is quickly discharged.	- The temperature is too low. - The battery pack is not fully charged. Charge the battery pack again. - The battery pack reached its lifespan and cannot be recharged. Use another battery pack.

故障处理

- ❖ 如果这些说明不能够解决问题，请与最近的三星授权服务中心联系。

症状与解答

电源

症状	解释 / 解答
不能开启电源	- 数码摄像机也许没有安装电池组。 - 插入的电池组电量也许已经消耗完。为电池组充电，或者更换一块新的电池组。 - 如果您使用的交流电源适配器，请确认适配器的另一端已经连接了电源插座。
电源自动关闭	"Auto power off"(自动断电)功能是否设置为"5 min"(5分钟)？如果5分钟左右没有操作任何按钮，则数码摄像机便会自动关闭("Auto power off"(自动断电))。不选择使用此项功能，请更改"Auto power off"(自动断电)为"Off."(关闭)。 ➤第69页 - 电池组电量已经消耗枯竭。请为电池组充电或是更换一块新的电池组。
不能关闭电源	- 去除电池组或是拔出交流电源适配器，并且在重新开启数码摄像机之前再次连接电源。 - 按下RESET按钮，然后在开启之前再次连接电源。➤第17页
电量快速消耗完	- 使用的环境温度太低。 - 电池组未被充满电。再次为电池组充电。 - 电池组寿命接近尾声并且已经不能充电。请使用其他的电池组。

Displays

Symptom	Explanation/Solution
The screen of TV or LCD displays distorted images or has stripes at the top/ bottom or utmost left/right.	It can occur when recording or viewing a 16:9-ratio image on a 4:3-ratio TV, or vice versa. For more details, see the display specification. ➔page 45
Unknown image appears on the LCD screen.	The HD camcorder is in Demo mode. If you do not want to see Demo image, change the setting “Demo” to “Off.” ➔page 71
Unknown indicator appears on the screen.	A warning indicator or message appears on the screen. ➔pages 96~99
The afterimage remains on the LCD screen.	This occurs if you disconnect the AC power adaptor or remove the battery pack before turning the power off.
The image on the LCD screen looks dark.	- Ambient light too bright. Adjust the brightness and angle of LCD. - Use LCD enhancer function.

Recording

Symptom	Explanation/Solution
Pressing the Recording start/stop button does not start recording.	- Press the MODE button to set Movie (📹). ➔page 17 - There is not enough free space to record on the storage media. - Check if memory card is not inserted or write-protect tab is set to lock.
The actual recording time is less than the estimated recording time.	- The estimated recording time may vary depending on content and features used. - When you record an object that moves fast, the actual recording time may be shortened.

显示

症状	解释/解答
电视机或 LCD 屏幕显示扭曲的画面或在四周出现条纹。	当在4:3高宽比电视机上录制或观看一个16:9高宽比图像的时候可能会出现此类现象。反之亦然。欲知详情，请参见显示规格。➔第45页
LCD 显示屏上显示未知图像	- 数码摄像机当前为“演示”模式。 - 更改“Demo”(演示)设置为“Off”(关闭)。➔第71页
屏幕上显示未知图标	屏幕上显示的为警告图标或提示信息。➔第96~99页
LCD 显示屏上有残像	如果您在关闭电源之前拨开交流电能适配器或去除电池组会发生这种情况。
LCD 显示屏上画面灰暗	- 四周太明亮。调整LCD亮度和角度。 - 使用LCD增强器功能。

录制

症状	解释/解答
按下 录制开始 / 停止 按钮却不能进行录制	- 按下MODE模式按钮设置到影音录制模式(📹)。➔第17页 - 可用空间不足，不能在存储媒体上录制。 - 检查是否没有插入存储卡或者存储卡的写保护片设置为关闭。
实际录制时间少于估计的时间	- 估计可录制的时间仅为参考值。 - 当您录制一个快速移动的物体，实际录制的时间也许会缩短。

troubleshooting

Symptom	Explanation/Solution
The recording stops automatically.	- There is no free space for more recording on the storage media. Back up important files in the PC and format the storage media or delete the unnecessary files. - If you make a frequent recording or deletion of files, the performance of the storage media will be deteriorated. In this case, format the storage media again. - If you use the memory card with low writing speed, the HD camcorder automatically stops recording the movie images then the corresponding message appears on the LCD screen.
When recording a subject illuminated by bright light, vertical line appears.	This is not a malfunction.
When the screen is exposed to direct sunlight during recording, the screen becomes red or black for an instant.	This is not a malfunction.
During recording, the date/time does not display.	"Date/Time" is set to "Off." Set the "Date/Time" to On. ➤page 66
You cannot record a photo image.	- Set your HD camcorder to Photo mode. ➤page 17 - Release the lock on the write-protection tab of the memory card if any. - The storage media is full. Use a new memory card or format the storage media. ➤page 68 Or remove unnecessary images. ➤page 79
The shutter sound is not heard when you record a photo image.	Set "Shutter Sound" to "On."
The beep sound is not heard.	- Set "Beep Sound" to "On." - Beep sound is temporally off while recording movies.

故障处理

症状	解释/解答
录制自动停止	- 存储介质上没有多余的空间进行录制。将重要文件转移到电脑并且格式化存储介质或者删除一些多余的文件。 - 如果您进行频繁的录制或是删除文件，固件内置闪存将会磨损。在这种情况下，请再次格式化内置存储器。 - 如果您使用写入速度较慢的存储卡，高清数码摄像机将自动停止录制影音图像然后屏幕上显示相应提示信息。
当在明亮的光源下录制一个主题，显示垂直线	这不是故障。
在录制期间当屏幕被阳光直射的时候，在一瞬间屏幕会变为红色或是黑色	这不是故障。
录制过程中不显示日期 / 时间	"Date/Time"(日期/时间)设置为"Off"(关闭)。将"Date/Time"(日期/时间)设置为打开。 ➤第66页
不能拍照	- 将高清数码摄像机设置到拍照模式 ➤第17页 - 将存储卡的写保护片打开。 - 存储介质已满，更换一张新的存储卡或者格式化存储卡。 ➤第68页或者删除一些多余的图像。 ➤第79页
当拍照的时候不能听到快门音	设置"Shutter Sound"(快门音)为"On."(打开)。
不能听到蜂鸣音	- 设置"Beep Sound"(蜂鸣音)为"On."(打开)。 - 在录制影音期间蜂鸣音短时间关闭。

Symptom	Explanation/Solution
There is a time difference between the point where you press Recording start/stop button and the point where the recorded movie starts/stops.	On your camcorder, there may be a slight time delay between the time when you press Recording start/stop button and the actual point where the recorded movie starts/stops. This is not an error.
The aspect ratio (16:9/4:3) of a movie cannot be changed.	The aspect ratio of a movie at 16:9 cannot be changed to 4:3.
The available recording time or the number of recordable images displayed does not decrease.	The maximum available recording time displayed is 999 minutes and the maximum number of recordable images displayed is 99,999 even though the actual count exceeds the value displayed. However, the actual available recording time is not affected by the count displayed. For example, when the actual available recording time is "1,066" minutes, "999" will be displayed on the screen.

Storage Media

Symptom	Explanation/Solution
Memory card functions are not operable.	- Insert a memory card into your camcorder properly. ➡ page 27 - If you use a memory card formatted on a computer, format it again directly on your camcorder. ➡ page 68
Image cannot be moved or deleted.	- Release the lock on the write-protect tab of the memory card (SDHC/SD memory card), if any. ➡ page 29 - You cannot move or delete the protected images. Release the protection of the image on the device. ➡ page 78
You cannot format the memory card.	- Release the lock on the write-protect tab of the memory card (SDHC/SD memory card), if any. ➡ page 29 - The memory card is not supported on your camcorder or card has some problems.
The data file name is not indicated correctly.	- The file may be corrupted. - The file format is not supported by your HD camcorder. - Only the file name is displayed if the directory structure complies with the international standard.

症状	解释/解答
在按下 录制开始/停止 按钮的时间点和摄像机开始/停止录制影音的时间点之间存在时差	对于您的摄像机，当您按下录制开始/停止按钮到实际录制开始/停止的时间，也许会有极小的时差。这不是错误。
不能更改影音的高宽比 (16:9/4:3)	高宽比为16:9的影音不能更改为4:3的高宽比。
显示的可录制时间或可拍摄照片图像的数量不会减少。	尽管在有些时候实际可录制的时间和可拍摄照片图像的数量会超过屏幕上所显示的数值，但可录制时间在屏幕上也仅能够显示到999分钟；同样，可拍摄照片图像的数量在屏幕上也仅能够显示到99,999张。 然而，屏幕上显示的数字并不代表就是实际可录制的时间。 例如：当实际可录制的时间为“1066”分钟时，在屏幕上却仍然只显示到“999”分钟。

存储介质

症状	解释/解答
存储卡功能不可以操作	- 在数码摄像机内插入存储卡。 ➡第27页 - 如果您在电脑上格式化的存储卡，请直接在本数码摄像机上对存储卡再次进行格式化 ➡第68页
不能移动或删除图像	- 如果存储卡有写保护片的话，请将写保护片关闭。(SDHC, 标准SD存储卡等) ➡第29页 - 您不能移动或者删除被保护的图像。用摄像机解除保护功能。 ➡第78页
不能格式化存储卡	- 如果存储卡有写保护片的话，请将写保护片关闭。(SDHC, 标准SD存储卡等) ➡第29页 - 本摄像机不支持该存储卡或者存储卡本身出现问题。
数据文件名显示错误	- 文件也许损坏。 - 您的摄像机不支持该文件格式。 - 仅当目录结构符合国际标准时才会显示文件名。

troubleshooting

Adjusting the image during recording

Symptom	Explanation/Solution
Focus does not adjust automatically.	- Set "Focus" to "Auto." ➔ page 56 - The recording conditions are not suitable for auto focus. Adjust the focus manually. ➔ page 57 - The lens is dusty on the surface. Clear the lens and check the focus. - Recording is being made in a dark place. Light up to brighten the place.
The image appears too bright or flickering, or changes in color.	This may occur when you make a recording under a fluorescent sodium, or mercury lamp. Cancel "Scene Mode (AE)" to avoid or minimise this phenomenon. ➔ page 52
Image's color balance is not natural.	White balance adjustment is required. Adjust to the proper "White Balance." ➔ page 53
The subject passing by the frame very fast appears to bend.	This is called the focal plane phenomenon. This is not a malfunction. Because of the way the image device (CMOS sensor) reads out video signals, the subject passing by the frame rapidly might appear to bend, depending on the recording condition.

Playback on your HD camcorder

Symptom	Explanation/Solution
Using the playback (Play/Pause) function does not start playing.	- Image files recorded using another device may not be played on your HD camcorder. - Check out the memory card compatibility. ➔ page 29

故障处理

录制期间调整图像

症状	解释/解答
不能自动调整聚焦	- 设置"Focus"(聚焦)为"Auto"(自动)。➔第56页 - 录制条件不适合使用自动聚焦, 请调整为手动聚焦。➔第57页 - 镜头的表面有很多灰尘。请清洁镜头并且检查聚焦方式。 - 录制是在一个光线黑暗的地方进行的。请使该地方明亮起来。
图象看上去太明亮或闪烁, 或颜色被改变	当在一盏日光灯、钠灯, 或水银灯之下录制图象的时候会发生这种情况。取消"Scene Mode (AE)"(场景模式(AE))使发生这种现象的可能性减到最小。➔第52页
图像的颜色平衡不自然	需要调整白平衡。重新设置合适的"White Balance"(白平衡) ➔第53页
主体框架迅速显示弯曲	该现象被成为焦点飞机现象。这不是故障。由于图像设备 (CMOS传感器) 是读视频信号的方式, 根据录制的情况主体框架坑内出现迅速地弯曲。

在摄像机上播放

症状	解释/解答
使用播放(播放/暂停)功能不能开始播放	- 使用其他设备录制的图像文件也许不能在本摄像机上进行播放。 - 检查存储卡兼容性。➔第29页

Symptom	Explanation/Solution
Photo images stored on a storage media are not displayed in the actual size.	Photo images recorded on other device may not appear in the actual size. This is not an error.
Playback is interrupted unexpectedly.	Check if the AC power adaptor or battery back is properly connected and secure.

Playback on other devices (TV, etc)

Symptom	Explanation/Solution
You cannot view the image or hear the sound from the connected device.	- Connect the audio of the component cable or Multi-AV cable to your camcorder or to the connected device (TV, HD recorder, etc). (Red color- right, White color- left) - The connection cable (Multi-AV cable, component cable, etc) is not connected properly. Make sure that the connection cable is connected to the proper jack. ➡pages 43-44 - When you are using the S-Video cable, make sure to connect red and white plugs of your Multi-AV cable separately since S-Video cable does not support audio. ➡page 44, 46 - When you are using the component cable, make sure the red and white plugs of your component cable are connected. ➡pages 43-44

症状	解释/解答
存储在存储介质上的照片图像不能以实际大小显示。	在其他设备上拍摄的照片不能以实际大小显示。这不是错误。
播放被突然中断	请检查交流电源适配器或电池组是否正常稳固地被连接。

在其他设备上播放（电视机，等）

症状	解释/解答
不能通过连接的设备看到图像或者听到声音	- 通过连接AV 电缆的音频线至您的摄像机或连接至的其他设备(电视机, DVD 录像机, 等) (红色- 右边, 白色- 左边) - 连接电缆 (Multi-AV电缆, 分量电缆, 等) 连接不当。请确认连接电缆被正确连接到相应的接口。➡第43-44页 - 当您使用S-Video电缆时, 请确认将Multi-AV 电缆的红色和白色的插头是否连接正确, S-Video电缆不支持音频。➡第44, 46页 - 当您使用分量电缆时, 请确认分量电缆的红色和白色插头是否连接。➡第43-44页

troubleshooting

Symptom	Explanation/Solution
The image appears distorted on a TV.	This happens when TV type of the HD camcorder is different from the TV. Set TV type correctly according to the aspect ratio of your TV. ↪page 70
You cannot view the image or hear the sound from a TV connected using the HDMI cable.	Images do not output from the HDMI jack, if copyright protected content is contained in the image.

Connecting/Dubbing with other devices (Recorder, PC, Printer, etc)

Symptom	Explanation/Solution
You cannot dub correctly using the HDMI cable.	You cannot dub images using the HDMI cable.
You cannot dub correctly using the Multi-AV cable.	The Multi-AV cable is not connected properly. Make sure that the Multi-AV cable is connected to the proper jack, i.e. to the input jack of the device used for dubbing images from your camcorder. ↪page 46
Printouts cannot be made using a PictBridge printer.	Your printer may not print images edited on a computer or recorded using other device. This is not an error.

故障处理

症状	解释/解答
在电视机上图像显示失真	当电视机类型与高清数码摄像机的类型不同时，发生此类现象。设置根据您的电视机的高宽比设置电视机类型。↪第70页
不能通过连接HDMI电缆的电视机看到图像或听到声音	如果图像版权受保护，则图像不能从HDMI端口输出。

与其他设备连接/复制(刻录机，电脑，打印机，等)

症状	解释/解答
通过 HDMI 电缆连接无法正确地进行复制	请不要使用HDMI电缆进行复制。
通过 Multi-AV 电缆无法正确地进行复制	Multi-AV电缆连接错误。确保已Multi-AV线连接至正确的插孔，即，连接至用于复制摄像机中图像的设备的输入插孔。↪第46页
使用 PictBridge 打印机无法执行输出打印	您的打印机不可以打印在电脑上修改的图像或使用其它设备拍摄的图像。这不是故障。

Connecting to a computer

Symptom	Explanation/Solution
The computer does not recognise your HD camcorder.	- You cannot use the HD camcorder in the Macintosh environment. - Disconnect the USB cable from the computer and camcorder, restart the computer, then connect it again correctly.
Cannot play a movie file properly on a PC.	- A video codec is needed to play the file recorded on your HD camcorder. Install the software provided with your camcorder. ➡ pages 86-87 Please install by using the software CD that came with this camcorder. We do not guarantee compatibility for different CD versions. - Make sure you insert the connector in the correct direction, and connect the USB cable to the USB jack on your camcorder firmly. - Disconnect the cable from the computer and camcorder, restart the computer. Connect it again properly.
Cannot use the provided software (DVD Suite) on the Macintosh computer.	You cannot use DVD Suite with a Macintosh computer.
DVD Suite does not function properly.	Exit the DVD Suite program, and restart the Windows computer.
The image or sound on your camcorder is not played on your computer properly.	- Movie playback or sound may stop temporarily depending on your computer. The movie or sound copied to your computer is not affected. - If your camcorder is connected to a computer that does not support Hi-speed USB (USB2.0), the image or sound may not be played correctly. The image and sound copied to your computer are not affected.
The playback screen is paused or distorted.	- Check the system requirements to play a movie. ➡ page 85 - Exit other all applications running on the current computer. - If a recorded movie is played on your camcorder connected to a computer, the image may not play smoothly, depending on the transfer speed. Please copy the file to your PC, and then play it back.

连接至电脑

症状	解释/解答
电脑不能识别您的高清数码摄像机	- 在Macintosh环境下不能使用本高清数码摄像机。 - 从电脑和摄像机上断开USB数据线，重新启动电脑然后再次正确连接它。
电脑不能播放影音文件	- 在数码摄像机上播放文件需要一个视频解码编码器。请安装随摄像机所提供的软件。 ➡第86-87页 请安装使用随本摄像机提供得CD光盘安装软件。使用其它不同版本的CD光盘安装软件，我们不能保证其兼容性。 - 请确保您正确地插入连接器，并且USB数据线牢固地连接到摄像机的USB端口。 - 请从电脑和摄像机上拔除电缆，重新启动电脑。并且再次连接它们。
不能在 Macintosh 电脑上使用提供的软件 (DVD Suite)	您不能在 Macintosh 电脑上使用DVD Suite软件。
不能正常使用 DVD Suite	退出DVD Suite，然后重新启动Windows电脑。
摄像机上的图像或是声音不能在电脑上正常播放	- 根据电脑的情况影音播放或声音也许会暂时停止。这不影响您将影音或声音复制到电脑。 - 如果您的摄像机被连接至不支持高速USB (USB2.0) 的电脑，图像或声音也许不能被正常播放。
播放的屏幕暂停或者扭曲	- 请检查播放影音文件的系统要求。 ➡第85页 - 退出当前电脑上的所有应用程序。 - 如果将摄像机连接至电脑播放已录制的影音，根据转换速度，图像也许不能顺利地播放。请将文件复制到电脑，然后再播放。

troubleshooting

Overall operations

Symptom	Explanation/Solution
The date and time are incorrect.	Has the camcorder been left unused for a long period of time? The backup built-in rechargeable battery may be discharged. ➔page 25
The camcorder does not turn on, or does not operate by pressing any button.	Reset the system (press the RESET button). ➔page 17

Menu

Symptom	Explanation/Solution
Menu items are greyed out.	- You cannot select greyed items in the current recording/playback mode. - There are some functions you cannot activate simultaneously. The following list shows examples of unworkable combinations of functions and menu items. - Menu and quick menu cannot be used in EASY Q mode. - The following menu cannot be used during recording: "White Balance (Custom WB)," "Quality," "Wind Cut," "Digital Zoom," Storage selection, and Settings menu. Cannot use "Scene Mode (AE)" "Digital Zoom" Because of the following settings "Exposure; Manual" "Shutter; Manual" "Anti-Shake (EIS)," "Cont. Shot"

故障处理

全体操作

症状	解释/解答
日期和时间错误	是否长时间没有使用本摄像机？备用内置充电电池可能已没有电量。➔第25页
摄像机不能开机或按下任何按钮都不能操作。	重启系统(按下RESET按钮)。➔第17页

菜单

症状	解释/解答
菜单选项是灰色的	- 在当前录制/播放模式您不能对显示为灰色的选项进行选择。 - 有一些无法同时激活的功能。以下列出的功能在菜单项不能一起使用。 - 菜单和Q.MENU在EASY.Q模式下不能使用。 - 以下菜单在录制期间不能使用：“白平衡(自定义白平衡)”，“质量”，“风声消除”，“数字变焦”存储选择与菜单设置。 不能使用 "场景模式(AE)" "数字变焦" 因为以下设置 "曝光：手动" "快门：手动" "防震动(EIS)," "连续拍摄"

specifications

Model name: SC-HMX10/HMX10A/HMX10C/HMX10N/HMX10CN/HMX10ED

System	
Video signal	NTSC
Picture compression format	H.264 (MPEG-4 AVC)
Audio compression format	AAC (Advanced Audio Coding)
Image device	1/4.5" CMOS (Complementary Metal-Oxide Semiconductor) (Max/Effective : 1.61M/1.56M pixels)
Lens	F1.8 10x (Optical), 2x (Digital) Electronic zoom lens
Focal length	3.3 ~ 33mm
Filter diameter	Ø30
LCD screen	
Size/dot number	2.7inches wide 230k
LCD screen method	TFT LCD
Connectors	
Composite output	1SC-p (75Ω terminated)
Component output	Y: 1SC-p, 75Ω, Pb/Pr, Cb/Cr: 0.350SC-p, 75Ω
HDMI output	A type connector
Audio output	-7.5dBs (600Ω terminated)
USB output	Mini-B type connector
External MIC	Ø3.5 stereo
General	
Power source	DC 8.4V, Lithium Ion battery pack 7.4V
Power source type	Lithium Ion battery pack, Power supply (100V~240V) 50/60Hz
Power consumption (Recording)	3.9W (LCD on)
Operating temperature	0~40°C (32°F~104°F)
Storage temperature	-20°C ~ 60°C (-4°F ~ 140°F)
External dimensions (WxHxD)	Width 61.5 mm (2.42 inches), Height 67.5 mm (2.66 inches), Length 120.5 mm (4.74 inches)
Weight	330 g (0.72 lb, 11.64 oz) (Except for Lithium Ion battery pack)
Internal MIC	Omni-directional stereo microphone
Remote control	Indoors: greater than 15 m (49 ft) (straight line), Outdoors: about 5 m (16.4 ft) (straight line)

- These technical specifications and design may be changed without notice.

规格

型号名: SC-HMX10/HMX10A/HMX10C/HMX10N/HMX10CN/HMX10ED

系统	
视频信号	NTSC
图像压缩格式	H.264 (MPEG-4 AVC)
音频压缩格式	AAC (Advanced Audio Coding)
图像器件	1/4.5" CMOS (电荷耦合器件) (最大 / 有效 : 1.61M/1.56M 像素)
镜头	F1.8 10x (光学变焦), 2x (数字变焦) 电子变焦镜头
焦距	3.3 ~ 33 mm
滤色镜直径	Ø 30
LCD 显示屏	
尺寸 / 像素数	2.7 英寸宽屏幕, 230k
LCD 成像方式	TFT-LCD
连接器	
复合输出	1SC-p (75Ω 终止)
分量输出	Y: 1SC-p, 75Ω, Pb/Pr, Cb/Cr: 0.350SC-p, 75Ω
HDMI 输出	A 类型连接器
音频输出	-7.5dBs (600Ω 终止)
USB 输出	Mini-B 类型连接器
外置 MIC	Ø3.5 立体声
概述	
电源	DC 8.4V, 锂离子电池组 7.4V
电源类型	锂离子电池组, 提供电源 (100V~240V) 50/60Hz
消耗电量 (录制)	3.9W (LCD 打开)
工作温度	0~40°C (32°F~104°F)
保存温度	-20°C ~ 60°C (-4°F ~ 140°F)
尺寸 (WxHxD)	宽度 61.5 mm (2.42 英寸), 高度 67.5 mm (2.66 英寸), 长度 120.5 mm (4.74 英寸)
重量	330 g (0.72 lb, 11.64 oz) (除去纽扣电池)
内置 MIC	全向立体声麦克风
遥控器	室内: 大于 15 m (49 ft) (直线距离), 室外: 大约 5 m (16.4 ft) (直线距离)

- 技术规格可能有变化, 恕不另行通知。

contact SAMSUNG world wide

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

三星全球服务网

如果您对三星产品有任何疑问或者建议，请联系三星客服中心。

Region	Country	Contact Center ☎	Web Site
North America	CANADA	1-800-SAMSUNG (726-7864)	www.samsung.com/ca
	MEXICO	01-800-SAMSUNG (726-7864)	www.samsung.com/mx
	U.S.A.	1-800-SAMSUNG (726-7864)	www.samsung.com/us
Latin America	ARGENTINE	0800-333-3733	www.samsung.com/ar
	BRAZIL	0800-124-421, 4004-0000	www.samsung.com/br
	CHILE	800-SAMSUNG (726-7864)	www.samsung.com/cl
	NICARAGUA	00-1800-5077267	www.samsung.com/nicar
	HONDURAS	800-7919267	www.samsung.com/hn
	COSTA RICA	0-800-507-7267	www.samsung.com/co
	ECUADOR	1-800-10-7267	www.samsung.com/ec
	EL SALVADOR	800-6225	www.samsung.com/sv
	GUATEMALA	1-800-299-0013	www.samsung.com/gu
	JAMAICA	1-800-234-7267	www.samsung.com/ja
	PANAMA	800-7267	www.samsung.com/pa
	PUERTO RICO	1-800-692-3180	www.samsung.com/pr
	REP. DOMINICA	1-800-751-2676	www.samsung.com/dm
	TRINIDAD & TOBAGO	1-800-SAMSUNG (726-7864)	www.samsung.com/tt
	VENEZUELA	0-800-100-5303	www.samsung.com/ve
	COLOMBIA	01-8000112112	www.samsung.com/co
	BELGIUM	02 201 2418	www.samsung.com/be
Europe	CZECH REPUBLIC	800-726-786 (800 - SAMSUNG)	www.samsung.com/cz
	DENMARK	70 70 19 70	www.samsung.com/dk
	FINLAND	030-6227 915	www.samsung.com/fin
	FRANCE	3266 SAMSUNG (€ 0.15/Min) 08 25 08 65 65 (€ 0.15/Min)	www.samsung.com/fr
	GERMANY	01805 - SAMSUNG (726-7864 € 0.14/Min)	www.samsung.de
	HUNGARY	06-80-SAMSUNG (726-7864)	www.samsung.com/hu
	ITALY	800-SAMSUNG (726-7864)	www.samsung.com/it
	LUXEMBURG	02 261 03 710	www.samsung.com/lu
	NETHERLANDS	0800-SAMSUNG (726-7864 € 0.10/Min)	www.samsung.com/nl
	NORWAY	815-95 490	www.samsung.com/no
	POLAND	0 801 801 881 022-607-93-33	www.samsung.com/pl
	PORTUGAL	0800-SAMSUNG (726-7864)	www.samsung.com/pt
	SLOVAKIA	0800-SAMSUNG (726-7864)	www.samsung.com/sk
	SPAIN	902-1-SAMSU (72678)	www.samsung.com/es
	SWEDEN	0771-400 200	www.samsung.com/se
	U.K.	0845 SAMSUNG (7267864)	www.samsung.com/uk
CIS	EIRE	0818 717 100	www.samsung.com/ie
	AUSTRIA	0800-SAMSUNG (726-7864)	www.samsung.com/at
	SWITZERLAND	0800-SAMSUNG (726-7864)	www.samsung.com/ch
	RUSSIA	8-800-555-55-55	www.samsung.ru
	KAZAKHSTAN	8-10-800-500-55-500	www.samsung.com/kz_ru
	UZBEKISTAN	8-10-800-500-55-500	www.samsung.com/kz_ru
	KYRGYZSTAN	00-800-500-55-500	
	TADJIKISTAN	8-10-800-500-55-500	
	UKRAINE	8-800-502-0000	
	LITHUANIA	8-800-77777	www.samsung.ua
	LATVIA	8000-7267	www.samsung.com/lv
	ESTONIA	800-7267	www.samsung.ee
	AUST. HALLIA	1300 362 903	www.samsung.com/au
	NEW ZEALAND	0800 SAMSUNG (0800 726 786)	www.samsung.com/nz
	CHINA	800-810-5858, 400-810-5858, 010-6475 1880	www.samsung.com/cn
	HONG KONG	2686 4698	www.samsung.com/hk
Asia Pacific	INDIA	3030 8282, 1800 110011, 1-800-3000-8282	www.samsung.com/in
	INDONESIA	0800-112-8888	www.samsung.com/id
	JAPAN	0120-367 522	www.samsung.com/jp
	Malaysia	1800-88-5899	www.samsung.com/my
	PHILIPPINES	1800-10-SAMSUNG (726-7864)	www.samsung.com/ph
	SINGAPORE	1800-SAMSUNG (726-7864)	www.samsung.com/sq
	THAILAND	1800-26-3232, 02-689-3232	www.samsung.com/th
	TAIWAN	0800-326-5899	www.samsung.com/tw
	VIETNAM	1-800-588 889	www.samsung.com/vn
	TURKEY	444 77 11	www.samsung.com/tr
	OUTH AFRICA	0860-SAMSUNG (726-7864)	www.samsung.com/za
	U.A.E	800-SAMSUNG (726-7864), 8000-4726	www.samsung.com/ae

The Samsung logo, consisting of the word "SAMSUNG" in white, bold, sans-serif capital letters, centered within a dark, horizontally-oriented oval.

RoHS compliant

Our product complies with "The Restriction Of the use of certain Hazardous Substances in electrical and electronic equipment", and we do not use the 6 hazardous materials- Cadmium(Cd), Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr +6), Poly Brominated Biphenyls (PBBs), Poly Brominated Diphenyl Ethers(PBDEs)- in our products.

The Samsung logo, consisting of the word "SAMSUNG" in white, bold, sans-serif capital letters, centered within a dark, horizontally-oriented oval.

符合RoHS标准

我们的产品符合“在电子电气设备禁用某些有害物质的指令”。该指令规定产品中不含有6种有害物质即镉 (Cd)、铅 (Pb)、汞 (Hg)、六价铬 (Cr+6)、聚合溴化联苯(PBBs)、聚合溴化联苯乙醚 (PBDEs)。

Code No. AD68-01308F-00